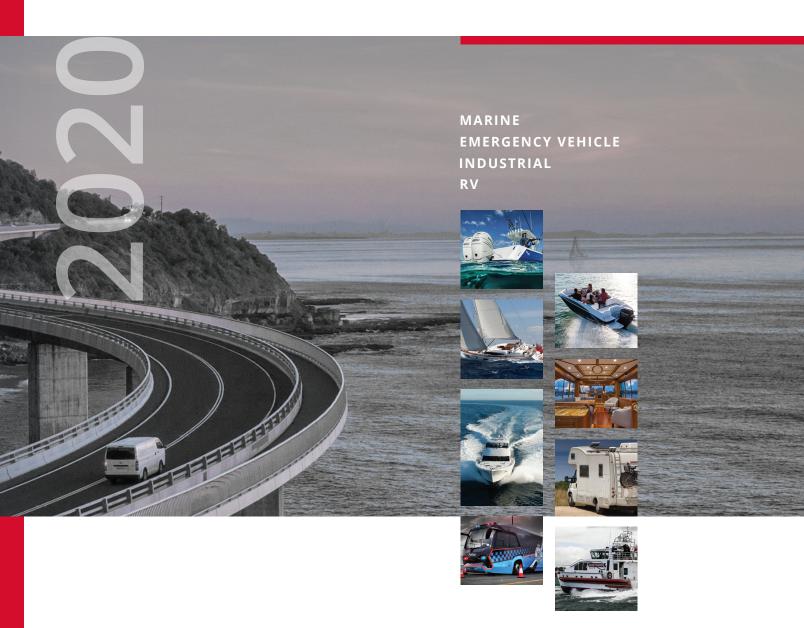
BEP



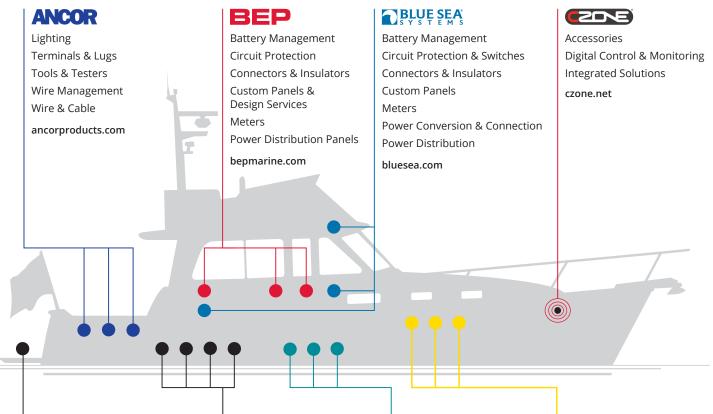
Battery Management
Circuit Protection
Connectors & Insulators
Custom Panel & Design Services
Meters

Power Distribution Panels



For decades Ancor, BEP, Blue Sea Systems, CZone, Lenco, Marinco, Mastervolt and ProMariner have worked independently to provide innovative electrical products. Now the eight companies are working together to offer comprehensive electrical solutions for marine and mobile applications.

Providing more than products. Providing Solutions.





Actuators & Accessories
Auto Glide Automatic Boat Leveling
Electric Hatch Lifts
Electric Trim Tabs
Rocker Switch Kits
Tactile Switch Kits

lencomarine.com

Trim Tab Retrofit Kits

ProMariner[™]

Inverter / Chargers
Inverters
Isolators
Vented Battery Chargers
Waterproof Battery Chargers
promariner.com

MASTERVOLT

Alternators & Regulators
Batteries
Battery Chargers
Digital Control & Monitoring
Inverter / Chargers
Inverters
Transformers
mastervolt.us

MARLINCO

Battery Management
DC Power Connections
Horns
Lighting
Power Conversion
Shore Power
Ventilation
Wiper Systems

marinco.com











What makes BEP different:

I Founder's Vision

BEP offers a range of high quality electrical solutions designed for the harsh Marine and RV environments. Every product meets exacting performance specifications and is designed to withstand extreme conditions, both at sea, and on land.

I Solutions Focused

The BEP team is intimate with the marine environment and develops solutions that improve the installation and use of the products they design. The new products developed reduce assembly time, save space and improve the user experience.

I Innovation & Engineering

BEP's innovative culture and engineering excellence is focused on simplifying the installation and optimizing the user experience with thoroughly tested products that will thrive in the harsh marine environment.

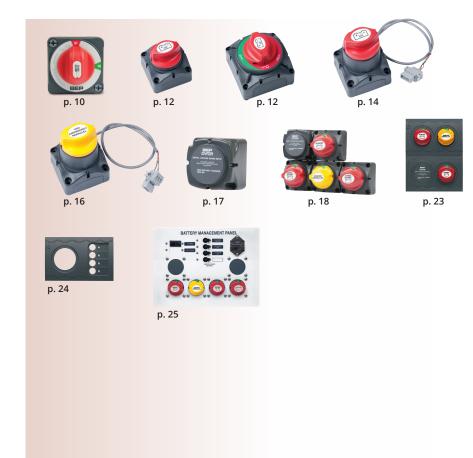
I Worldwide Support

BEP customers have global support in APAC, EMEA and the Americas. The network of support will resolve any issues that come up in supply, technical support and installation questions. BEP is committed to provide the products and support needed to make your installation and experience the best in the industry.

Table of Contents

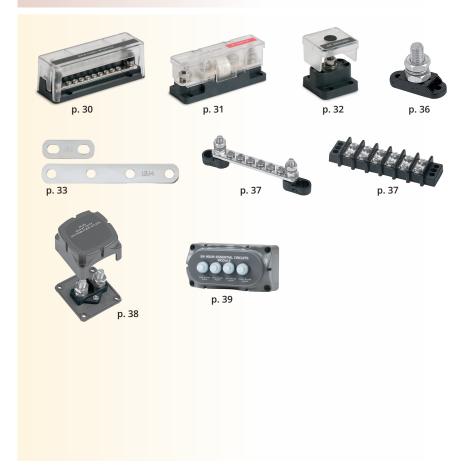
BATTERY MANAGEMENT

Pro Installer Battery Switches	8
110 mstaller battery Switches	O
Battery Switches	12
Remote Operated	
Battery Switches	14
Voltage Sensing Relays	16
Battery Distribution Clusters	18
Battery Distribution Panels	23
Battery Management Panels	25



CONNECTORS & INSULATORS

Pro Installer Bus Bars	28
Pro Installer Fuse Holders	31
Pro Installer Insulated Studs	32
Pro Installer Link Bars	33
Insulated Studs	36
Bus Bars	37
Distribution Studs	38
Circuit Breaker Modules	39



CIRCUIT PROTECTION & SWITCHES

Marine Fuses 42
Fuse Holders 43
Circuit Breakers 44
Switches 48

POWER DISTRIBUTION PANELS

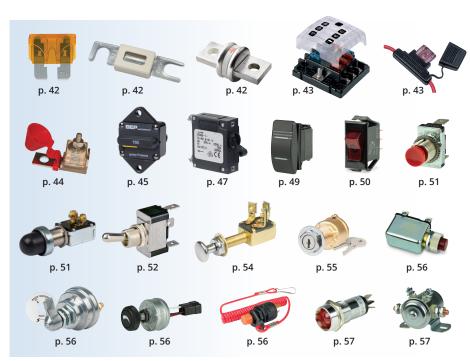
Switch Panels 60
Push Button Switches 64
Custom Panel &
Design Services 65
DC Circuit Breaker Panels 68
AC Circuit Breaker Panels 74
Labels (Panels & Switches) 77

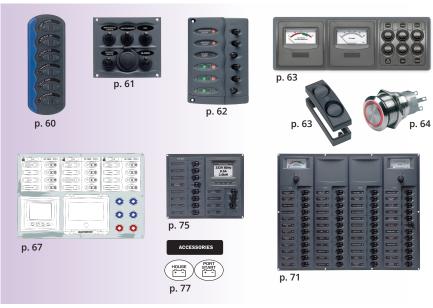
METERS

AC & DC Systems Monitors 84
Tank Senders & Modules 86
Gas Detectors 88
Analog & Digital Meters 90

APPENDIX & INDEX

Wire & Cable Technical Data 92 Part Number Index 95







BATTERY MANAGEMENT

Pro Installer Battery Switches



The Pro Installer range of premium quality battery switches offer ease and flexibility of installation, and optimal performance in the harsh marine environment.

Battery Switches



BEP has pioneered development of battery switches for marine use. Ongoing R&D has further optimised these products to offer a range of high quality but cost effective manual switching solutions.

Remote Operated Battery Switches

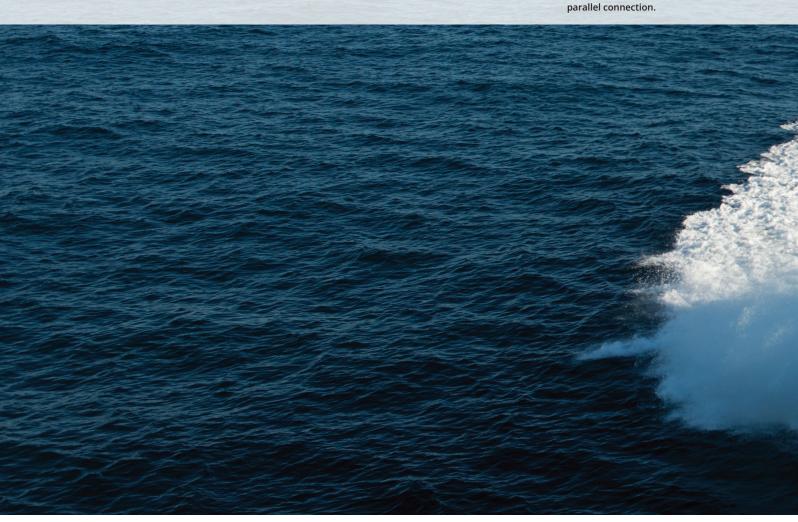


The MD range of battery switches allow you to install the battery switch very close to the battery, to remotely manage the increased electrical loads found on today's boats. They are ideal for remote isolation of bow and stern thrusters.

Voltage Sensing Switches



These switches 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 while also offering remotely activated, high current, emergency parallel connection.



BATTERY MANAGEMENT

Digital Voltage Sensing Relay (DVSR)



The Digital Voltage Sensing Relay (DVSR) provides a highly efficient but inexpensive solution for automatic charging of a second battery bank. It ensures correct charging while removing the risk of flat start batteries.

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.

Battery Distribution Panels



The fastest and easiest way to panel mount a battery switch cluster, contour connect panels provide low profile panel mounting plus flexibility in layout.

Battery Management Panels



We've integrated our battery switches, circuit protection and secondary charging accessories into one convenient to install panel. In addition to our standard range, we can build custom panels to suit your requirements.



Quality and performance are critical to Maritimo yachts which is why they specify BEP electrical products.



Pro Installer Battery Switches

The Pro Installer range of premium quality battery switches offer ease and flexibility of installation, and optimal performance in the harsh marine environment. With models that offer on/off, selector and dual bank control functionalities, the switches feature improved contactor design, ergonomics that provide clear intuitive operation, an industry standard mounting footprint (Perko, Guest, Blue Sea E Series) and all switches meet global industry standards. The innovative dual bank control switch offers the functionality of three switches in one. The patent pending, EZ-Mount switch range allows wiring from the front simplifying installation and saving labor. All Pro Installer EZ-Mount switches feature a common interconnection height with the full line of Pro Installer power management products, which allow them to "cluster" with other products utilizing solid link bars. Attention to all aspects of switch function and use has created superior installation options, high power capacity and improved reliability.



All Pro Installer Switches:

- Meet global industry standards UL1107, CE and ABYC
- · Ignition protected
- · IP66 rated
- · Removable side plates
- Ergomonic removable switch knobs

See page 28 for more Pro Installer products to complete your cluster.

Pro Installer Standard Mount Switches

This powerful generation of battery switches have a 400 amp rating 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.

- Switch studs face back of switch (when viewed from front)
- Panel mounting allows direct access to the switch studs from rear of panel
- $\bullet\,$ Does not share Pro Installer interconnection height due to different mount options
- Accepts metric or imperial fasteners with innovative nut retention

Standard Mounting Options







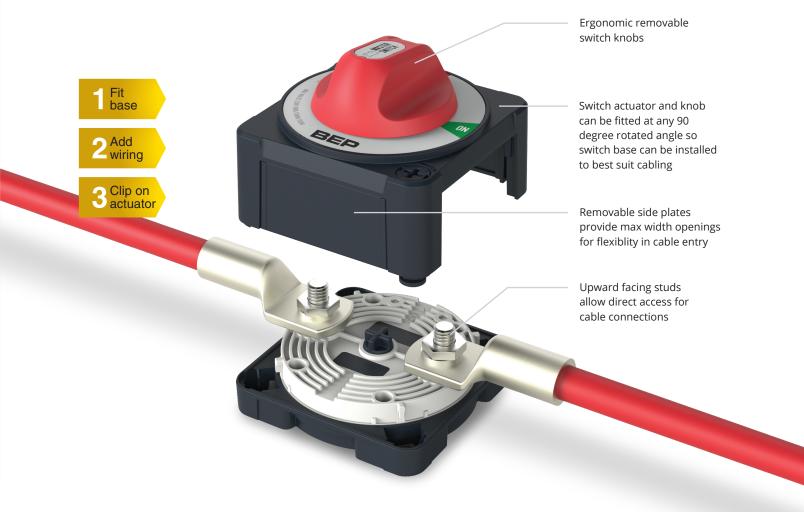
Front Panel Mount



Rear Panel Mount



Check out our Award Winning Pro Installer EZ-Mount Switches



Pro Installer EZ-Mount Switches

Why Pro Installer EZ-Mount?

As easy as 1, 2, 3, these revolutionary, patent pending battery switches from BEP allow you to wire from the front. Simply remove the back, wire, and then clip the actuator and cover in place. Never has installation been so easy. These durable switches accept large cables or multiple lugs and feature intuitive, ergonomic switch positioning and clear graphics. The EZ-Mount switches have a compact, industry standard footprint, the ability to cluster with other Pro Installer products saving valuable onboard space, and are rated 400A continuous, 600A intermittent. Constructed for longevity in the marine environment, they meet rigorous global standards.





Surface Mount Only



Miami Boatshow



IBEX



Multi award winning including the prestigious METS DAME award.

Pro Installer Battery Switches

On/Off Battery Switches

For isolation of a single positive supply e.g. as a main House or Start battery switch

Double Pole On/Off Battery Switches

Used where positive and negative supplies must be isolated at the same time.

Note: 770-DP & 770-DP-EZ are replacing 720-DP

Selectors (771-S-EZ & 771-S) & Selector with Field Disconnect (771-SFD) Battery Switches

Power requirements on boats have increased, and these 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 Systems).

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

Note: 771-S & 771-S-EZ are replacing 721

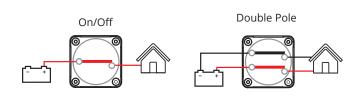


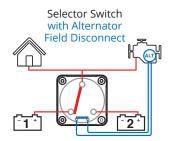


	On/Off	Switch	Double Pole Switch			Selector Switch		Selector w/ Field Disconnect	
	EZ-Mount	Standard	EZ-Mount	Standard		EZ-Mount	Standard	Standard	
Part #	770-EZ	770*	770-DP-EZ	770-DP		771-S-EZ	771-S	771-SFD	
OEM #	770-EZ-B	770-B	770-DP-EZ-B	770-DP-B		771-S-EZ-B	771-S-B	771-SFD-B	
Mounting	Surface ONLY	Surface, Rear or Front	Surface ONLY	Surface, Rear or Front		Surface ONLY	Surface, R	ear or Front	
Voltage		48V DC (for 12	2–48V systems)			48V DC (for 12–48V systems)			
Rating‡		400 Cont / 600 In	nter / 1500 Crank			400 Cont / 600 Inter / 1500 Crank			
Dims	3.85" x 3.85" x 3.62" / 98 x 98 x 92 mm					3.85" x 3.85'	x 3.62" / 98 x 98 x 92	mm	
Operation	On/Off					1-2-Both-Off			
Stud	2x 10 m	m (3/8")	4x 10 m	m (3/8")		3	x 10 mm (3/8")		

^{*}Emergency Parallel option Part # 770-KEY-EP.

^{‡120}mm2 or 4/0 cable required to meet rating.





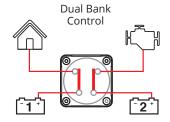
SAFETY NOTE 770-DP & 770-DP-EZ: These switches are not recommended for switching house and start battery systems at the same time, for safety reasons. You may need to isolate your engine battery in an emergency, but not your house battery which typically powers the communications. For this application please use the new Dual Bank Control Switch (772-DBC or 772-DBC-EZ) or one of our battery switch clusters.

Dual Bank Control Battery Switches

These innovative (patent pending) switches combine the functions of 3 battery switches into one 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.

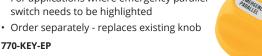


Dual Bank Co	ontrol Switch
EZ-Mount	Standard
772-DBC-EZ	772-DBC
772-DBC-EZ-B	772-DBC-B
Surface ONLY	Surface, Rear or Front
48V DC (for 12–48V systems, bo	th banks must be same voltage)
400 Cont / 600 Ir	nter / 1500 Crank
3.85" x 3.85" x 3.62	." / 98 x 98 x 92 mm
1, 1/2, Pa	rallel, Off
4x 10 m	nm (3/8")



Battery Knob Options for 770 Series

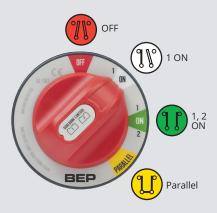
- · For applications where emergency parallel switch needs to be highlighted



POWERTID

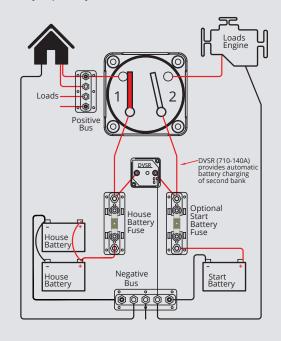
Dual Bank Control—3 Battery Switches in 1

The Dual Bank Control Battery Switches are an ideal all-in-one solution for a boat or RV with one engine, and two battery banks. This switch combines functionality of 3 switches in 1—House, Start, and Emergency Parallel. The unique, patented safety "1 On" position provides isolation of the Start circuits while leaving the House circuits powered. This allows the user to make an emergency radio call following engine malfunction, or to safely service the engine while House circuits are operational. Intuitive switch operation with ergonomically shaped knob allow for easy operation. Unsurpassed cable access, switch studs placed to allow doubled, back-to-back cable lugs provide for tidy installations.



System Example and the Isolated 1-ON Position

In the example below charging is automated by the Digital VSR, so normal control of the system is accomplished by simply turning the Dual Bank Control switch Off/On. Battery banks have been optimized to suit their respective loads, and the load groups are completely isolated during normal operation. The Isolated 1-ON and Emergency Parallel functions are available as additionally required by the user.



Battery Switches



Contour Battery Master Switch

- Patented Contour Locking System allows switch to be a stand alone unit, or locked together with other switches
- Control knob can be removed by switching to counter-clockwise 45° position
- Three removable side plates 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
- 2.1" (52 mm) hole for mounting
- Available with house knob (OEM # 701B-HB) or with chassis knob (OEM # 701B-CH)



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 ensuring that it meets ABYC requirements.

 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.





Easyfit™ Battery Switch

Created primarily for installations where switches need to be recessed through varying thicknesses of panels.

- Easily removable threaded ring allows for panel thicknesses up to 3/4" (19 mm)
- Same features as the 701 with the removable knob 45° past the off position
- Includes removable back cover ensuring that it meets ABYC requirements
- Surface mount option offers a unique style compared to other switches available on the market
- Can easily be retro-fitted in place of most European post and lever type switches



Heavy-Duty Battery Switch

The 720 is well suited to larger vessels, being capable of handling the high electrical loads found on today's boats and RV's plus starting large diesel engines.

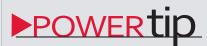
- Rated at 600A continuous and 2500A cranking
- Can be rear panel, or surface mounted
- Uses the same proven style of self cleaning sliding copper contact used inside the 701



Heavy-Duty Battery Selector Switch

The 721 is our heavy-duty selector switch. Housed in the same module as the 720, it includes the same removable plates and back cover.

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



BEP Battery Switch Construction

All BEP battery switches are molded in a high strength, fiber reinforced plastic which provides excellent high temperature performance, and the greatest resistance to chemicals that damage other plastic types.

Related Products



Label Sets page 80 Interchangeable labeling system available (Part # 713 or 715)

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

	Rating (A DC)									
Part #	OEM#	in LxWxH	mm LxWxH	Cont	Inter (5 min)	Crank (10 sec)	Voltage (V DC)	Operation	Stud size Studs x (in/mm)	Cable to meet rating (AWG/mm²)
700	700B	2.7" x 2.7" x 4.3"	68 x 68 x 110 mm	275	455	1250	48	On/Off	2x 3/8" / 10mm	3/0 / 95mm ²
701	701B	2.75" x 2.75" x 3"	69 x 69 x 75 mm	275	455	1250	48	On/Off	2x 3/8" / 10mm	3/0 / 95mm ²
701S	701S-B	2.75" x 2.75" x 3"	69 x 69 x 75 mm	200	300	1000	48	1-2-Both-Off	3x 5/16" / 8mm	1/0 / 50mm ²
720	720B	4" x 4" x 3.5"	102 x 102 x 90 mm	600	800	2500	48	On/Off	2x 1/2" / 12mm	2x 3/0 / 2x 95mm ²
721	721B	4" x 4" x 3.5"	102 x 102 x 90 mm	600	800	2500	48	1-2-Both-Off	2x 1/2" / 12mm	2x 2/0 / 2x 95mm ²

Panel Mounted Battery Switches

Panel Mounted Switches

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

- · Compact, lightweight
- Removable knob 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 (page 80)
- 701-PM provides On/Off operation for one battery bank
- 701S-PM offers Selector functionality (1/2/1&2) to select between two battery banks



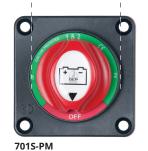
Mounting Plates

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

For	Part #	LxW
701	BSP-1	3 75" x 3 75" / 95 x 95 mm

As shown in Contour Connect panels











701-PM

Specifications

	Rating (A DC)									
Part #	OEM#	in LxWxH	mm LxWxH	Cont	Inter (5 min)	Crank (10 sec)	Voltage (V DC)	Operation	Stud size Studs x (in/mm)	Cable to meet rating (AWG/mm²)
701-PM	701B-PM	2.75" x 2.75" x 3"	69 x 69 x 67 mm	275	455	1250	48	On/Off	2x 3/8" / 10mm	3/0 / 95mm ²
701S-PM	701S-B-PM	2.75" x 2.75" x 3"	69 x 69 x 67 mm	200	300	1000	48	1-2-Both-Off	3x 5/16" / 8mm	1/0 / 50mm ²

Related Products



Battery Knob Options for 701 Series

- For applications where emergency parallel switch needs to be highlighted
- Order separately replaces existing knob





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.

- · 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 with switch off for 701-MD @ 15mA and 701-MDCZ @ 12mA
- · LED status identification for remote control switch
- · Can be either surface, or rear panel mounted
- Uses interchangeable labelling system (Part # 713 or 715 on page 80)

Optical sensor benefits (720-MDO only)

- Same easy connection for standard installation
- · Ability to control different voltage circuits
- · 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)





Specifications - All recessed or surface mount, tin-plated copper studs & nuts, ignition-protected UL1107

					Rating (A	DC)				
Part #	OEM#	in LxWxH	mm LxWxH	Cont	Inter (5 min)	Crank (10 min)	Voltage (V DC)	Function	Stud size Studs x (in/mm)	Cable to meet rating (AWG/mm²)
701-MD	_	2.7" x 2.7" x 4"	69 x 69 x 101 mm	275	455	1250	9.5-32	On/Off	2x 3/8" / 10 mm	3/0 / 95mm ²
701-MD-D	_	(Deutsch Plug)	(Deutsch Plug) Same dimensions and ratings as above							
720-MDO	_	4" x 4" x 4.33"	102 x 102 x 110 mm	500	700	2500	9.5-32	On/Off	2x 1/2" / 12 mm	3/0 / 95mm ²







Remote On/Off Key Switch

For the remote operation of the 701-MD and 720-MDO battery switches (above).

Can be mounted standalone or within the Contour Connect panel range.

Part # 80-724-0006-00



Terminal Link Kits (TLK's)

Now available for the 701 and 720 size battery switches, the TLK's allow for cable connections to be made outside of the body of the switches.

Part # 80-708-0017-00 701-MD
Part # 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 four 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
- Requires 12V supply for operation, relay channels are fully isolated and are rated 0–32V, 5A
- Activation of the four circuits may be either latching (all four the same), or momentary

Part # 80-911-0045-00





/U1-KEY-EP

Battery Knob Options for 701 Series

For applications where emergency parallel switch needs to be highlighted.

Order separately - replaces existing knob.

Dual Operation VSS (Voltage Sensitive Switch) and Emergency Parallel

These Voltage Sensitive Switches 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, fiber 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

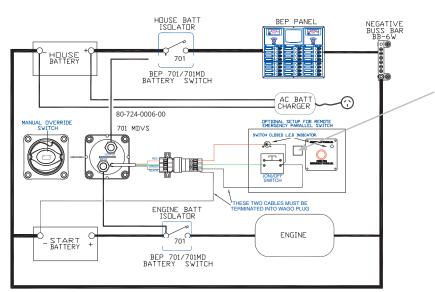
- 10 minute remotely activated emergency parallel function (no voltage sensitive function)
- 12/24 volt operation (both banks must be same voltage)



80-701-0018-00



Part #	in LxWxH	mm LxWxH	Volts (V)	Rating (A)	Engages (V DC)	Disengages (V DC)	Cable to meet rating (AWG/mm²)
701-MDVS	2.7" x 2.7" x 4"	69 x 69 x 101 mm	12	275	13.7	12.2-13.00	3/0 / 95mm ²
720-MDVSO	4" x 4" x 4.3"	102 x 102 x 110 mm	12/24	500	13.3/26.6	12.7/25.4	2x 3/0 / 2x 95mm ²
701-MDVS-24V	2.7" x 2.7" x 4"	69 x 69 x 101 mm	24	275	27.4	24.4-26.00	3/0 / 95mm ²
80-701-0018-00	2.7" x 2.7" x 4"	69 x 69 x 101 mm	12/24	275	Emergency	Parallel Only	3/0 / 95mm ²
720-MDO-EP	4" x 4" x 4.3"	102 x 102 x 110 mm	12/24	500	Emergency	Parallel Only	2x 3/0 / 2x 95mm ²





Remote Emergency Parallel Switch

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

Part # 80-724-0007-00

DVSR: Dual Battery Charging Made Easy

The Digital Voltage Sensing Relay (DVSR) provides a highly efficient but inexpensive solution for automatic charging of a second battery bank. It ensures correct charging while removing the risk of flat start batteries. When the voltage on the first bank rises sufficiently, the DVSR engages allowing the second 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

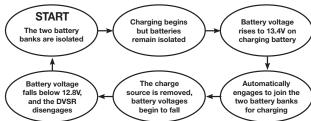
Digital Technology Provides:

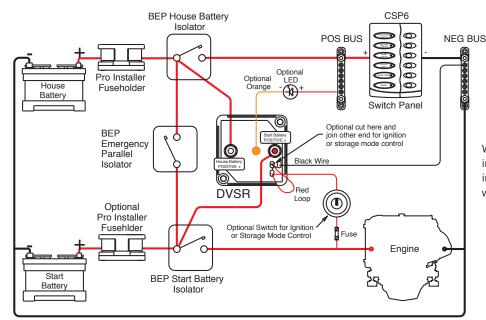
- Multi voltage, auto selects between 12V and 24V DC operation
- Digital circuits provide very low power consumption (<2mA in standby, up to 8x more efficient than analog models) and enhanced performance
- Remote sensing circuitry allows optional connection from ignition switch, provides same functionality 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



Part #	OEM#	in LxWxH	mm LxWxH	Volts (V)	Rating (A) Continuous	Engages (V DC)	Disengages (V DC)	Cable to meet rating (AWG/mm²)
710-140A	710-140A-B	2.75" x 2.75" x 2"	69 x 69 x 50 mm	12/24	140	13.4/26.8	12.8/25.6	8 / 8mm ²

DVSR Operation (shown for 12V system)





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

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 Relay. Upgrade your existing model that ends in "-100A" or "-100A-B" with any of the models on the following three pages.





See page 23 for panel versions

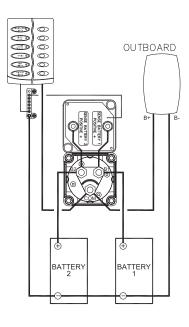
Single Engine, Two Battery Banks

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.

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

See table on page 20 for specifications





Single Engine, Two Dedicated Battery Banks

Available as horizontal or vertical units.

To be used in the following systems:

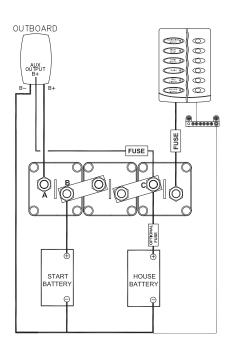
- 1) Single outboard dual battery bank
- 2) Single alternator dual battery bank
- 3) Twin alternator dual battery bank

Part # 715-H horizontal Part # 715-V vertical

See table on page 20 for specifications



715-H





See page 23 for panel versions

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:

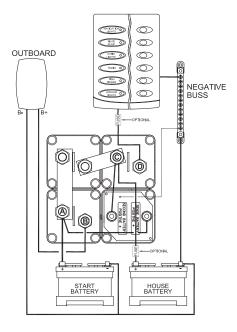
- 1. Single outboard dual battery bank.
- 2. Single alternator inboard engine dual battery bank.

The 716 cluster replaces battery isolator systems. For VSR operation, see page 16.

 Part #
 716-H-140A-DVSR
 horizontal

 Part #
 716-V-140A-DVSR
 vertical

 Part #
 716-SQ-140A-DVSR
 square

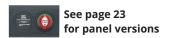




716-SQ-140A-DVSR



716-H-140A-DVSR





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 following page for specifications.

Part # 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 17. See table on following page for specifications.

Part # 718-140A-DVSR



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 below for specifications.

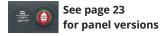
Part # 717-140A-DVSR



Triple Engine, Four Banks

This system is designed for triple engine installations. Once again using multiple VSRs off each start battery giving combined charge from all three engines into the house battery via VSRs. See table below for specifications.

Part # 719-140A-DVSR



Dimension guide

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



Specifications

Engine Type	Battery (banks)	DVSR	Orientation	Part #	in LxWx3	mm LxWx75
		yes	vertical	714-140A-DVSR	5.4" x 2.75"	138 x 69
		yes	horizontal	716-H-140A-DVSR	10.85" x 2.75"	276 x 69
Single inboard or outboard	2	yes	vertical	716-V-140A-DVSR	10.9" x 2.7"	276 x 69
Single inboard of outboard	2	yes	square	716-SQ-140A-DVSR	5.4" x 5.4"	138 x 138
		no	horizontal	715-H	8.1" x 2.75"	207 x 69
		no	vertical	715-V	2.75" x 8.1"	69 x 207
Twin inboard or outboard	2	no	horizontal	715-S	8.1" x 2.75"	210 x 69
Twin inboard	3	yes	horizontal	718-140A-DVSR	8.1" x 5.4"	207 x 138
Twin outboard	3	yes	horizontal	717-140A-DVSR	5.4" x 8.1"	138 x 207
Triple outboard	4	yes	square	719-140A-DVSR	8.1" x 8.1"	207 x 207

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



Single Engine, Two Battery Banks with Motorized VSR

Offers the same features as the 716-SQ-140A-DVSR (page 19), with two important differences. The VSR and Emergency Parallel switches are combined into one voltage-sensitive switch, and that switch is able to be remote-operated. For features of the motorized VSR, see page 17. The layout allows all cables to be attached from the bottom of the cluster.

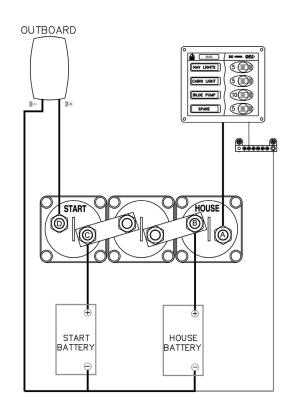
Part # 80-716-0017-00

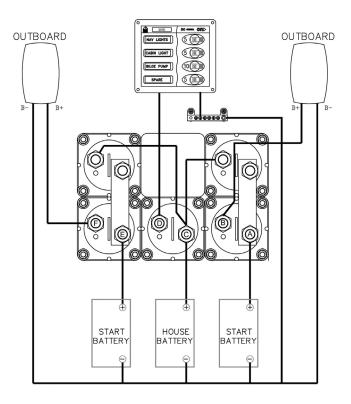


Twin Engine, Three Banks with Motorized VSR

Offers the same features as the 717-140A-DVSR (page 20). The VSR and Emergency Parallel switches are combined into one voltage-sensitive switch, and that switch is able to be remote-operated. For features of the motorized VSR, see page 17. The layout allows all cables to be attached from the bottom of the cluster.

Part # 80-716-0018-00





Remote Battery Management Clusters

- Complete system including all cable links (Battery Control Center ordered separately—see below)
- · 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 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	Part #
Single engine remote	80-700-0050-00
Twin engine remote	80-700-0051-00
Triple engine remote	80-700-0052-00



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 (page 18).

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

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

Part # CC-801

Dimensions for Contour Connect Panels

	LxWxH in		LxWxH mm			
Part #	Module	Cut-out	Module	Cut-out		
CC-801	6.5" x 4.2" x 2.2"	5.75" x 3.4"	166 x 106 x 55 mm	146 x 86 mm		
CC-810	9.2" x 4.2" x 2.2"	8.5" x 3.4"	233 x 106 x 55 mm	213 x 86 mm		
CC-802	6.5" x 8.3" x 2.2"	5.75 x 7.5"*	166 x 212 x 55 mm	88 x 148 mm*		
CC-803N	9.2" x 8.3" x 2.2"	8.5" x 3.4"*	223 x 212 x 55 mm	213 x 86 mm*		

^{*}Single hole only.



Single Engine, Two Battery Banks

The CC-810 is supplied standard with 3 \times 701-PM battery switches pre-assembled.

Ideal for installing alongside any other Contour Connect Modules.

Part # CC-810



Single Engine, Two Battery Banks

The CC-802 incorporates a version of our very successful single engine battery switch cluster (page 19). 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.

Part # CC-802



Twin Engine, Three Battery Banks

The CC-803N incorporates a version of our very successful dual engine battery switch cluster (page 20).

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.

Part # CC-803N







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-1 & CC-5 Modules

Will house the following components:

701-PM Panel mount battery on/off (page 13).

701S-PM Panel mount battery selector switch (page 13).

185 Series Heavy-duty circuit breakers (page 45).

(CC-HDBM must be ordered with 185 series circuit breakers, one per breaker).

710-140A Voltage Sensitive Relay (see page 17).



CC-2 Module

Will house the following components:

CLB series (push reset) Carling circuit breakers (page 46). Toggle Magnetic Hydraulic Carling circuit breakers (page 47).



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.

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

Part # CC-804



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.

Part # CC-BLANK



Solid Links

708 708 708

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

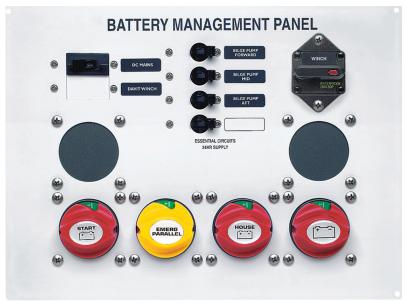
Must be ordered separately when ordering CC Kitset panels.

't #	Application
3-42.5	For horizontal linking of battery switches in the same panel
3-70.0	For horizontal linking of battery switches studs between two separate panels
8-107-V3	For vertical linking of battery switches between panels

708-42.5

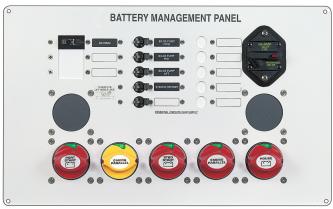
Battery Management Panels

- Essential circuits, 24-hour supply
- Mains breakers for control panels, davit winches, or treatment systems
- Panels are supplied with a BEP 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—Part # SET-MSP; additional label sets available (page 79)
- Spare positions for additional battery switches and circuit breakers for extras such as radio batteries and genset batteries
- · NOTE: Custom panels made on request



800-MS1

The 800-MS1 panel is designed for power or sail boats between 32.9-39.5 ft (10–12m) with single engines. 10.25" x 13.8" x 2.9" (260 x 351 x 75 mm)



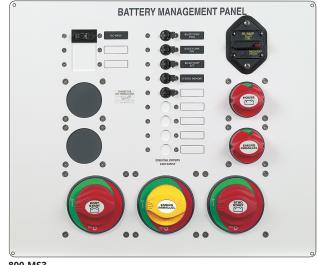
800-MS2

The 800-MS2 panel is designed for power boats between 32.9-39.5 ft (10-12m) with twin engines. 11.1" x 18.25" x 2.9" (281 x 463 x 75 mm)



800-MS4

The 800-MS4 panel is designed for sail boats up to 46 ft (14m) and power boats up to 32.9 ft (10m) with single engine. 6.3" x 9.4" x 2.9" (160 x 239 x 75 mm)



800-MS3

The 800-MS3 panel is designed for power boats between 39.5 - 52.5 ft (12-16m) with larger diesels. 15" x 18.25" x 3.75" (380 x 463 x 95 mm)

Auxiliary Parts (ordered separately)

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

For treatment systems, davit winches and sub-mains.

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

Circuit Breakers

CONNECTORS & INSULATORS

Pro Installer Bus Bars



Pro Installer Busbars are the ultimate solution for compact termination of small cables.

Pro Installer Fuse Holders



Pro Installer fuse holders offer flexibility to cover fusing requirements from 30–750 amps.

Pro Installer Insulated Studs



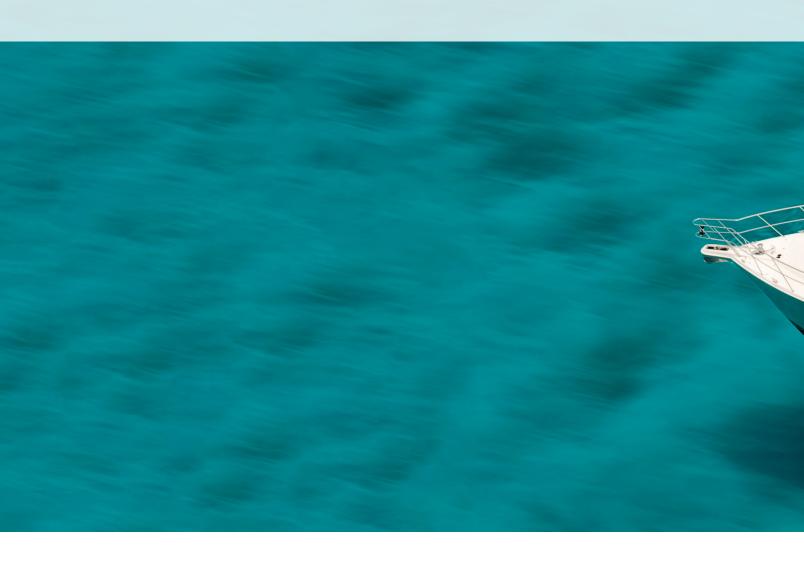
Pro Installer Insulated Studs are available in single and twin stud versions.

Pro Installer Link Bars





The Pro Installer range features modular products which can be linked together in order to provide space saving, fast installation clusters. These tinned copper link bars provide the means to join battery switches, bus bars, fuse holders and insulated studs.



CONNECTORS & INSULATORS

Insulated Studs



An economical range of connection studs for smaller electrical loads.

Bus Bars



Bus bar range for smaller connections and loads under 150A.

Distribution Studs



For connections where a robust, mechanically fastened cover is required for protection.

Circuit Breakers



Convenient surface mounting circuit breaker modules for main, secondary, or 24-hour circuit protection.



Australia's Riviera Boats specifies BEP products aboard their line of yachts, including the 75 Enclosed Flybridge.





Pro Installer Series

Onboard power demands continue to increase as boaters request the comforts of home on their boats. 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 BEP products, 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 10 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

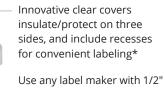
the most compact installations
 Robust construction for the barshest

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





Tin-plated copper conductors

High-temperature, fiber reinforced base materials for strength and chemical resistance



Typical Cluster example



Product Footp	orints	.5x	1x	1.5x	2.5x
Heavy-duty Bus B	ars				
777-BB4S-500	4 Stud		~		
777-BB3S-650	3 Stud		~		
777-BB5S-650	5 Stud			·	
777-BB8S-650	8 Stud				V
Z Bus Bars					
777-Z10W-200	10-way		V		
777-Z18W-200	18-way			✓	
ANL Fuse Holders					
778-ANL	ANL		~		
778-ANL2S	ANL with additional cable clamping studs			~	
778-ANLTP	ANL Through Panel		V		
Class-T Fuse Holde	ers				
778-T2S-400	225-400A			✓	
778-T2S-600	450-600A			✓	
Insulated Studs					
IST-8MM-1S	Single 8 mm	~			
IST-8MM-2S	Double 8 mm	~			
IST-10MM-8MM	Double 10 mm / 8 mm	V			
IST-10MM-1S	Single 10 mm	~			
IST-10MM-2S	Double 10 mm	~			
IST-8MM-1SPT	Single 8 mm with power tapping plate	~			
IST-10MM-1SPT	Single 10 mm with power tapping plate	V			

Pro Installer Heavy-duty Bus Bars

Pro Installer Heavy-duty Bus Bars provide a robust means to connect (bus) together the multitude of large cables found in modern electrical installations. They offer unrivaled flexibility to meet the requirements of any installation, saving significant cost and space.

Specifications:

- 4 Stud-500A bus bar: 8 mm (5/16") stainless steel studs
- 3, 5, and 8 stud-650A bus bars: 10 mm (3/8") stainless steel studs
- · Studs treated with anti-seize lubricant
- 50V DC
- Tinned CDA102 Copper conductors
- Stainless steel studs, washers, nuts for longevity in the marine environment
- · Generous stud lengths, metric threads

Description	Part #	OEM#	Footprint*
3 Stud Bus Bar	777-BB3S-650	777-BB3S-650-B	1 x
4 Stud Bus Bar	777-BB4S-500	777-BB4S-500-B	1 x
5 Stud Bus Bar	777-BB5S-650	777-BB5S-650-B	1.5 x
8 Stud Bus Bar	777-BB8S-650	777-BB8S-650-B	2.5 x

^{*} See page 29 for Footprint details

Related Products



Pro Installer Link Bars page 33

Pro Installer Z Bus Bars

BEP products have created a completely new concept for small cable termination with the Z-Bar range. These Bus Bars 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
- 4 mm (5/32") terminals with captive lock washers
- 200A maximum per bar (2x 200A)
- 50V DC
- Tinned CDA102 Copper conductors
- Stainless steel studs, washers, nuts for longevity in the marine environment
- Metric threads

Description	Part #	OEM#	Footprint*
10-way, Z Bus Bar	777-Z10W-200	777-Z10W-200-B	1 x
18-way, Z Bus Bar	777-Z18W-200	777-Z18W-200-B	1.5 x

^{*} See page 29 for Footprint details

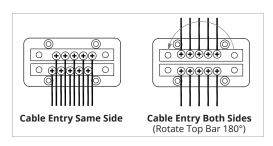
Related Products



Pro Installer Link Bars page 33







Pro Installer ANL Fuse Holders

These ANL fuse holders offer unparalleled circuit protection choice for both the installer and end-user. The innovative Through-Panel fuse holder (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: 8 mm (5/16") studs on 778-ANL, 10 mm (3/8") studs on 778-ANL-TP and 778-ANL-2S
- Fuse mounting studs: 8 mm (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
- 50V DC
- Tinned CDA102 copper conductors 778-ANL-2S
- Tinned CDA260 high conductivity brass conductors 778-ANLTP

Description	Part #	OEM#	Footprint*
Fuse Holder, ANL	778-ANL	778-ANL-B	1 x
Fuse Holder, ANL with additional cable clamping studs	778-ANL2S	778-ANL2S-B	1.5 x
ANL Through Panel	778-ANLTP	778-ANLTP-B	1 x

^{*} See page 29 for Footprint details



Related Products







ANL Fuses page 42

Pro Installer 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 Fuse Holder 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
- 50V DC
- High temperature, fiber 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

Description	Part #	OEM#	Footprint*
Fuse Holder, Class-T 225–400A	778-T2S-400	778-T2S-400-B	1.5 x
Fuse Holder, Class-T 450–600A	778-T2S-600	778-T2S-600-B	1.5 x

^{*} See page 29 for Footprint details



Related Products



Pro Installer Link Bars page 33



Class T Fuses page 42

Pro Installer 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 10 mm and 8 mm 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, and 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 50V DC
- High temperature, fiber 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

Description	Part #	OEM#	Footprint*
Single 8 mm	IST-8MM-1S	IST-8MM-1S-B	0.5 x
Double 8 mm	IST-8MM-2S	IST-8MM-2S-B	0.5 x
Double 10 mm / 8 mm	IST-10MM-8MM	IST-10MM-8MM-B	0.5 x
Single 10 mm	IST-10MM-1S	IST-10MM-1S-B	0.5 x
Double 10 mm	IST-10MM-2S	IST-10MM-2S-B	0.5 x
Single 8 mm with power Tapping Plate	IST-8MM-1SPT	IST-8MM-1SPT-B	0.5 x
Single 10 mm with power Tapping Plate	IST-10MM-1SPT	IST-10MM-1SPT-B	0.5 x

^{*} See page 29 for Footprint details

Related Products



Pro Installer Link Bars page 33







IST-8MM-2S



IST-10MM-8MM



IST-10MM-1S



IST-10MM-2S



IST-8MM-1SPT



IST-10MM-1SPT



Pro Installer Link Bars

- A range of linking bars to complement the Pro Installer range of products
- High purity copper, tin plated for optimum marine electrical performance
- Fastest, most economic way of connecting products
- Saves space, allows clustering for the most compact installations
- Links can be doubled for higher loads



- **Step 1:** Use selection guide below to determine the correct link bar.
- **Step 2:** If multiple opitons exist, see diagrams for layout options on page 35.
- **Step 3:** Find the part number in the specifications table on page 34.



Linking Selection Guide

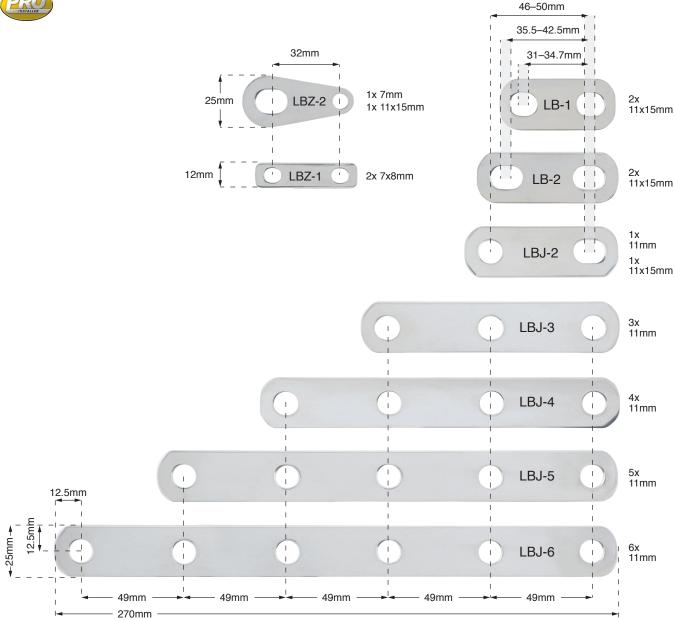
	3, 4, 5, & 8 Stud Heavy Duty Bus Bars	10 & 18 Way Z Bus Bars	778-ANL Fuse Holder	ANL Through Panel Fuse Holder	ANL & Class T Double Stud Fuse Holders	Single Insulated Studs	Double Insulated Studs	EZ Mount Battery Switch On/Off
Bus Bars								
3, 4, 5, & 8 Stud Heavy Duty Bus Bars	LB-1	LBZ-2	LB-1	_	LB-1 (4 Stud Gap)	LB-2	S:E LB-1 Gap LB-1	O: LB-2 C: LB-1
10 & 18 Way Z Bus Bars	LBZ-2	LBZ-1	LBZ-2	_	LBZ-2	_	Gap LBZ-2	LBZ-2
Fuse Holders								
778-ANL Fuse Holder	LB-1	LBZ-2	LB-2	_	LB-1	LB-2	S:E LB-1 Gap LB-1	O: LB-2 C: LB-1
ANL Through Panel Fuse Holder	_	_	_	LB-2	_	_	_	_
ANL & Class T Double Stud Fuse Holders	LB-1	LBZ-2	LB-1	_	LB-1	LB-2	S:E LB-1 Gap LB-1	O: LB-2 C: LB-1
Insulated Studs								
Single Insulated Studs	LB-2	_	LB-2	_	LB-2	LBJ-2	LB-1	LBJ-2 C: LB-2
Double Insulated Studs	S:E LB-1 Gap LB-1	Gap LBZ-2	S:E LB-1 Gap LB-1	_	S:E LB-1 Gap LB-1	LB-1	S:S LBJ-2 Gap LB-1	O: LB-1 C: Gap LB-1
EZ Mount Battery Switches								
EZ Mount Battery Switch On/Off	O: LB-2 C: LB-1	LBZ-2	O: LB-2 C: LB-1	_	O: LB-2 C: LB-1	O: LBJ-2 C: LB-2	O: LB-1 C: Gap LB-1	LB-1
EZ Mount Selector Battery Switch -"Battery" Studs	LB-2 (4 Stud LB-1)	LBZ-2	LB-2	_	O: LB-1 C: LB-2	LBJ-2	LB-1	_
EZ Mount Selector Battery Switch -"Common" Stud	O: LB-2 C: LB-1	LBZ-2	O: LB-2 C: LB-1	_	O: LB-2 C: LB-1	O: LBJ-2 C: LB-2	O: LB-1 C: Gap LB-1	_
EZ Mount Double Pole/ Dual Bank Control	O: LB-2 C: LB-1	_	O: LB-2 C: LB-1	_	O: LB-2 C: LB-1	O or C: LB-1	O: LBJ-2 C: LBJ-2	LB-2

Side to Side Joining Selection Guide

	Marking
Joining 2 products	LBJ-2
Joining 3 products	LBJ-3
Joining 4 products	LBJ-4
Joining 5 products	LBJ-5
Joining 6 products	LBI-6

Pro Installer Link Bars



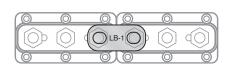


Specifications

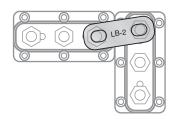
Marking	Part #	OEM#	Pkg Qty	Description	Function	Max Amps	L x W in	L x W mm
LB-1	_	779-LB-1-B	5	Link Bar 31-34.7 mm	Short Link Bar 8 & 10 mm studs	650	2.2" x 1.0"	56 x 25
LB-2	_	779-LB-2-B	5	Link Bar 35.5-42.5 mm	Medium Link Bar 8 & 10 mm studs	650	2.8" x 1.0"	69 x 25
LBJ-2	_	779-LBJ-2-B	5	Joiner 2-way 46-50 mm	Long Link Bar 8 & 10 mm studs	650	3.0" x 1.0"	74 x 25
LBZ-1	_	779-LBZ-1-B	5	Link Z Bar to Z Bar	Joins Z Bars End to End, Back to Back	250	2.0" x 0.5"	49 x 12
LBZ-2	_	779-LBZ-2-B	5	Link Z Bar to Bus Bar or F-holder	Joins Z Bars to Bus Bars or F-holders	400	2.1" x 1.0"	53 x 25
LBJ-2	779-LBJ-2	779-LBJ-2-B	1	Joiner 2-way	Side to Side joiner 2 products	650	3.0" x 1.0"	74 x 25
LBJ-3	779-LBJ-3	779-LBJ-3-B	1	Joiner 3-way	Side to Side joiner 3 products	525	4.9" x 1.0"	123 x 25
LBJ-4	779-LBJ-4	779-LBJ-4-B	1	Joiner 4-way	Side to Side joiner 4 products	450	6.9" x 1.0"	172 x 25
LBJ-5	779-LBJ-5	779-LBJ-5-B	1	Joiner 5-way	Side to Side joiner 5 products	400	8.8" x 1.0"	221 x 25
LBJ-6	779-LBJ-6	779-LBJ-6-B	1	Joiner 6-way	Side to Side joiner 6 products	350	10.8" x 1.0"	270 x 25

35

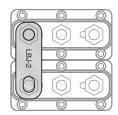
Diagrams



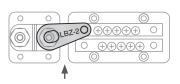
E:E End to End linking



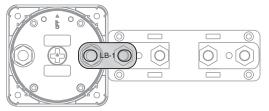
S:E Side to End linking



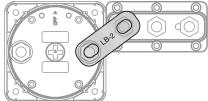
S:S Side to Side joining



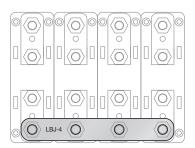
Gap For small gaps between products



C: Centerline linking



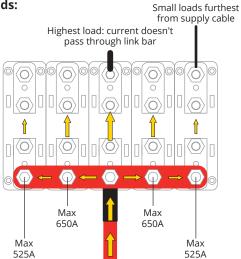
O: Offset linking



Joining

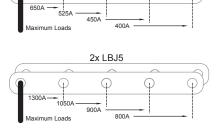
Best Electrical Practice for High Loads:

- Supply power to the center of link bars or bus bars to balance loads
- Connect highest loads directly/closest to the supply cable



Note: Link bars can be doubled to increase load capacity

1x LBJ5



Pro Installer Clusters

Example shown below using Pro Installer distribution components, link bars and the award winning EZ-Mount Battery Switch (page 10).



- Saves time
- · Saves space
- Eliminates the need for jumper wires between products
- Common Interconnection heights allow "clustering" utilizing solid link bars
- · Customize clusters for your application





Insulated Studs & Covers

- · Made with high temperature plastic bases
- Dual studs ideal for +ve / -ve connections, branch circuits, windlass or inverter installations.
- Stud covers push securely over the threaded stud covering to ABYC standards
- · Covers supplied with display versions.







IS-10MM-1R





OEM#

*Part #'s come with cover, OEM #'s do not.

IS-6MM-2

IS-10MM-2

IS-10MM-2/L



IS-6MM-2 **Dual Studs**

IS-6MM-2/DSP*

Part #

IS-10MM-2 IS-10MM-2/L

Stud Size

2 x [1/4" / 6 mm]

2 x [3/8" / 10 mm]

IS-10MM-8MM 1 x [3/8" / 10 mm], 1 x [5/16" / 8 mm]

2 x [3/8" / 10 mm] with link plate

Single Studs

Part #	OEM#	Stud Size	Polarity
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-8MM-2R	5/16" / 8 mm	Positive
_	IS-8MM-1	5/16" / 8 mm	Negative
_	IS-10MM-1R	3/8" / 10 mm	Positive
_	IS-10MM-1	3/8" / 10 mm	Negative

^{*}Part #'s come with cover, OEM #'s do not.

Covers

Part #	Description	Color
ISC-6-2	Double 6 mm	black
ISC-6-2R	Double 6 mm	red
ISC-10BK	Single 10 mm	black
ISC-10R	Single 10 mm	red



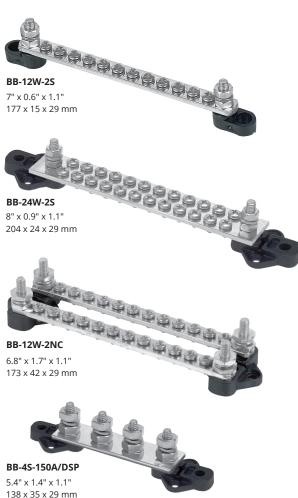


37

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





Part #	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-12W-2NC/DSP	BB-12W-2NC	Double	2 x 12	2 x 12-way	100
BB-4S-150A/DSP	BB-4S-150	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)







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)

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.

OEM # 702B



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.

OEM # 702-2S/B



4-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.

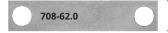
OEM # 704-4S/B

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.

Description	Stud Size	OEM#	LxWxH (in)	LxWxH (mm)
Distribution Stud	10 mm, 3/8"	702B	2.75" x 2.75" x 2"	69 x 69 x 50 mm
Dual Distribution Stud	2 x (10 mm, 3/8")	702-2S/B	2.75" x 2.75" x 2"	69 x 69 x 50 mm
	1 x (8 mm, 5/16") 1 mm x (10 mm, 3/8")	702-8-10-B	2.75" x 2.75" x 2"	69 x 69 x 50 mm
Dual Distribution Stud with Link Plate	2 x (10 mm, 3/8")	702-2SB/L	2.75" x 2.75" x 2"	69 x 69 x 50 mm
4-way Distribution Stud	4 x (10 mm, 3/8")	704-4S/B	5.3" x 2.75" x 2"	138 x 69 x 50 mm



19 mm Suits 701



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.

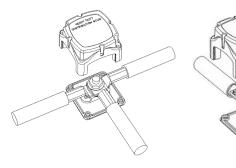
Part #		Distance between centers		diameter
708-42.5	1.7"	43 mm	3/8"	10 mm
708-54.5	2.2"	55 mm	3/8"	10 mm
708-64.5	2.5"	65 mm	3/8"	10 mm
708-68.5	2.7"	69 mm	3/8"	10 mm
708-62.0	2.45"	62 mm	1/2"	12 mm



Secondary Bus

Fitted to Distribution Stud 702 allows for small wire connections without cluttering main stud. Terminal screws 1/8" (4 mm).

Part # 702SB







24hr Service Circuit Breaker Module (4W)

Consists of 1 x 5A and 3 x 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 24-hour circuits cannot be switched off inadvertently. This is contained in the contour lock double module. Labels: SET-714

Part # 706-4WB OEM # 706-4W/B



24hr Essential Circuit Module

Designed for smaller systems where only two circuit breakers are required. Supplied with $2 \times 10A$ Carling CLB Series circuit breakers – push to reset.

Part # 706-2W OEM # 706-2W/B

Related Products



CLB Series Push Reset Thermal Circuit Breakers page 46



Contour Circuit Breaker

Allows switchable protection for heavy-duty circuits like Windlasses or Davit winches using Busman Heavy-duty thermal circuit breakers (120). Modular sizing with Contour Lock housing allows easy grouping. LED to indicate circuit is on. Five standard ratings available.

Part #	OEM#	Rating
705-50A	705-50A/B	50A
705-80A	705-80A/B	80A
705-100A	705-100A/B	100A
705-135A	705-135A/B	135A
705-150A	705-150A/B	150A



Circuit Breaker Module

Provides three 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 (page 47).

Labels ordered separately: SET-714.

Part # 707

Related Products



IEG Magnetic CB's page 47

Specifications

Part #	OEM#	Rating (A)	in LxWxH	mm LxWxH	Stud S	ize
707	_	1x 50A, 2x 25A	5.4" x 2.71" x 3"	138 x 69 x 75 mm	3/16"	5 mm
705-50A	705-50A/B	50A	5.4" x 2.71" x 3"	138 x 69 x 75 mm	1/4"	6 mm
705-80A	705-80A/B	80A	5.4" x 2.71" x 3"	138 x 69 x 75 mm	1/4"	6 mm
705-100A	705-100A/B	100A	5.4" x 2.71" x 3"	138 x 69 x 75 mm	1/4"	6 mm
705-135A	705-135A/B	135A	5.4" x 2.71" x 3"	138 x 69 x 75 mm	1/4"	6 mm
705-150A	705-150A/B	150A	5.4" x 2.71" x 3"	138 x 69 x 75 mm	1/4"	6 mm
706-4WB	706-4W/B	1x 5A, 3x 15A	5.4" x 2.71" x 3"	138 x 69 x 75 mm	5/32"	4 mm
706-2W	706-2W/B	2x 10A	2.71" x 2.71" x 2.75	69 x 69 x 70 mm	5/32"	4 mm

CIRCUIT PROTECTION & SWITCHES

Marine Fuses



Fast-acting, corrosion resistant fuses open quickly to protect circuits from overloads and short-circuits.

Fuse Holders

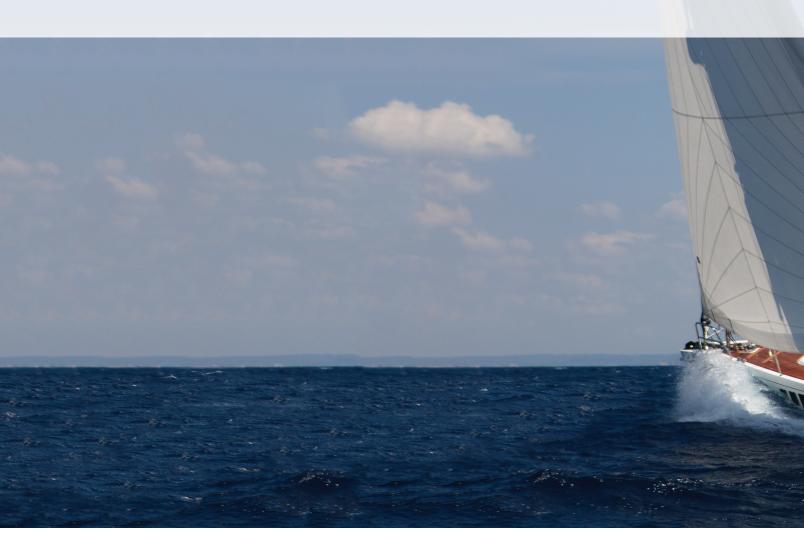


For protection of smaller systems and branch circuits, for ATO/ATC and maxi fuse ranges.

Marine Rated Battery Fuse



Highly compact fuses/holders which are ignition protected and able to protect main supply connections.



CIRCUIT PROTECTION & SWITCHES

Thermal Circuit Breakers



Thermal Circuit Breakers & RCD's:
Major DC circuit protection from 30-200
Amps, push to reset breakers for 10-40A
circuits, and RCD/RCBO panels for AC
Main circuit protection.

Magnetic Circuit Breakers



Precision operation circuit breakers, 5-100 amps, single, double and triple pole.

Switches



BEP Marine now offers a full line of manual switches including: toggle, rocker, push/pull, push-button, solenoids, and relays. The comprehensive selection ensures that BEP has the right switch to meet your needs.



Gunfleet Marine uses BEP circuit protection aboard their 58 Blue Water Cruising Yacht



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.



ATM Fuses

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

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



ATO®/ATC® Fuses

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

Rating (A)	Qty/ Pkg	OEM#
1	1	J01A
2	1	J02A
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
40	1	140A



MAXI® Fuses

Fuses available: 30-80A Interrupt capacity: 1000A DC Maximum voltage: 32V DC

Rating (A)	Qty/ Pkg	Part #	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



ANL Fuses

Use with:

- Pro Installer ANL Fuse Holders (page 31)
- Tin plated
- · Visible fuse status window
- 48V DC voltage rating
- Up to 3000 amp interrupt capacity

Length: 3.23" (82 mm) Width: 0.88" (22 mm)

Stud clearance: 0.43" (11 mm)

Rating (A)	Qty/ Pkg	Part #	OEM#
20	1	_	77049020
40	1	_	IP40
50	1	IP50P/DSP	IP50
63	1	IP63P/DSP	IP63
80	1	IP80P/DSP	IP80
100	1	IP100P/DSP	IP100
125	1	_	IP125
150	1	IP150P/DSP	IP150
160	1	_	77049160
175	1	_	IP175
200	1	IP200P/DSP	IP200
250	1	IP250P/DSP	IP250
300	1	IP300P/DSP	IP300
355	1	IP355P/DSP	IP355
400	1	_	77049400
425	1	IP425P/DSP	IP425
500	1	IP500P/DSP	IP500



Heavy-duty ANL Fuses

Use with:

- 5/16" (8 mm) mounting studs
- Pro Installer ANL Fuse Holders (page 31)



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



Class T Fuses

Interrupt capacity: 20,000A DC Maximum voltage: 160V DC Diameter: 1.34" (34 mm) Length: 2.77" (70 mm)

Use with:

• Pro Installer Class T Fuse Holders (page 31)



Rating (A)	Qty/ Pkg	OEM#
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

Heavy-duty Class T Fuses

Interrupt capacity: 20,000A DC Maximum voltage: 160V DC Diameter: 1.62" (41 mm) Length: 3.03" (77 mm)

Use with:

 Pro Installer Class T Fuse Holders (page 31)



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

Fuse Holders

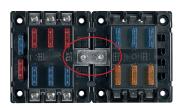


ATO®/ATC® Fuse Holders

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: 80 x 90 x 47 mm (3.1" x 3.6" x 1.9")
- ATC Bus bar: 35 x 90 x 47 mm

Description	Pack Qty	Part #	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 negative bus, 5 mm stud, cover, joiners	1/blister	80-712-0039-00	_
6-way fuse holder screw terminals w/ cover	24/pack	_	ATC-6W/B
6-way negative bus, 5 mm 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.



ATO®/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.

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.

Part # 702-MFH OEM # 702-MFH-B

Inline MAXI® Fuse Holder

2.8" x 2" x 1.42" (71 x 53 x 36 mm)

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" x 2.15" x .6" (80 x 55 x 15 mm)

Part # HDBFH/DSP OEM# HDBFH



Inline ATC Fuse Holder

Part # WAFH-14



Marine Rated Battery Fuse

Features:

- · Weatherpoof 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: 58V DC Maximum

• Amperage Rating: 30A - 300A

• Ingress Protection: IP66

• Ignition Protected: Per SAEJ1117

• Interrupt Rating: 10000A @ 14V DC, 5000A @ 32V DC, 2000A @ 58V DC

• 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



Terminal mount heavy-duty fuse holder and cover



Rating (A)	Qty/ Pkg	Part #	OEM#
50	1	MRBF-50A	MRBF-50A-B
80	1	MRBF-80A	MRBF-80A-B
100	1	MRBF-100A	MRBF-100A-B
125	1	MRBF-125A	MRBF-125A-B
150	1	MRBF-150A	MRBF-150A-B
200	1	MRBF-200A	MRBF-200A-B
250	1	MRBF-250A	MRBF-250A-B
300	1	MRBF-300A	MRBF-300A-B

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







MRCBP-200A

Mounting	Rating (A)	Part #	OEM#
Surface	200	MRCBF-200A	MRCBF-200A-B
Panel	200	MRCBP-200A	MRCBP-200A-B

Single Pole Thermal Type Breakers

• Ratings: 30–150A; 30V DC • Interrupt Capacity: 3000A

• 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 94VO; 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.





Manual reset versions only switch off on electrical overload i.e. cannot be manually switched



185100F-01-1

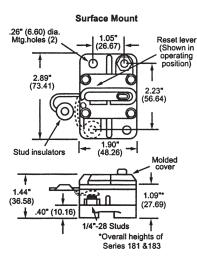
Switchable reset versions can be manually switched to isolate the circuit

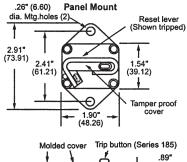
Manual Reset

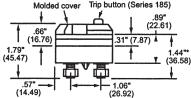
Rating (A)	Panel Mount OEM #	Surface Mount OEM #
50	184050P-01-1	_
60	184060P-01-1	_
80	184080P-01-1	_
100	184100P-01-1	184100F-01-1
150	184150P-01-1	184150F-01-1

Switchable Reset

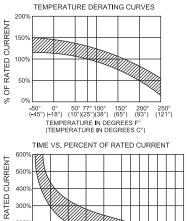
Rating (A)	Panel Mount Part #	Panel Mount OEM #	Surface Mount Part #	Surface Mount OEM #
30	185030P/DSP	185030P-01-1	185030F/DSP	185030F-01-1
40	185040P/DSP	185040P-01-1	185040F/DSP	185040F-01-1
50	185050P/DSP	185050P-01-1	185050F/DSP	185050F-01-1
60	185060P/DSP	185060P-01-1	185060F/DSP	185060F-01-1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

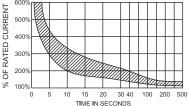






Temperature and Current Rating





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

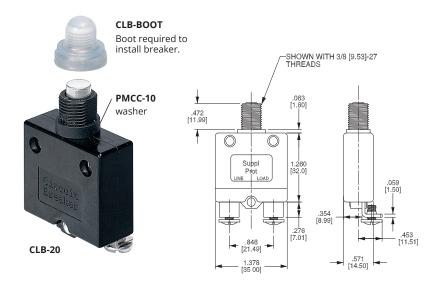
• Resettable overload capacity: 10 x rated current

• Approvals: UL, CUL, TUV, CE, UL1500, ISO8846 for ignition protection/marine

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

*DSP versions include circuit breaker, washer and boot

Description	OEM#
Boot	CLB-BOOT
Washer	PMCC-10



RCD Panels

We supply two Residual Current Devices (RCD) ratings (16 & 32 A). These also act as a circuit breaker (RCBO type), have an insulation rating of 400V AC, make/brake current of 6000A, a 30mA trip rating against electric shocks, and 300mA trip protection against fire risks. Due to the different mounting dimensions of the RCD's, these panels are made to be mounted separately from the main AC panel.

Rating (A)	Part #	HxWx2.5"	HxWx65 mm
16	900-RCD-16A	4.5" x 5"	115 x 127 mm
32	900-RCD-1X16-32A	4.5" x 5"	115 x 127 mm
16x2	900-RCD-2X16A	4.5" x 5"	115 x 127 mm
32x2	900-RCD-2X32A	4.5" x 5"	115 x 127 mm
16x1, + 32x1	900-RCD-32A	4.5" x 5"	115 x 127 mm

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





CB Options

• 230 volt

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



MCB

(see chart) (see chart)



MCB-3WENC 6.3" x 3.6" x 3.5" 160 x 92 x 90 mm



124001000 7.87" x 4.33" x 4.53" 200 x 110 x 115 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.

47

IEG Magnetic Circuit Breakers

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 UL 1077; CSA certified per CSA C22.2 No.235; Complies with EN 60947-2 & EN 60934
- · Available in single or double pole; triple pole available on special orders

Single pole	Rating (A)
CBS-5A-SP	5
CBS-10A-SP	10
CBS-15A-SP	15
CBS-20A-SP	20
CBS-25A-SP	25
CBS-30A-SP	30
CBS-40A-SP	40
CBS-50A-SP-IG	50

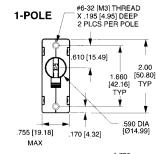
Compatible with BEP panels.

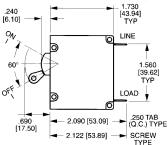
Double pole	Rating (A)
CBS-10A-DP	10
CBS-15A-DP	15
CBS-20A-DP	20
CBS-25A-DP	25
CBS-30A-DP	30
CBS-40A-DP	40
CBS-50A-DP	50

Triple pole	Rating (A)
CBS-50A-TP / 50	50
Double pole trip coil pole*	Volts (V)
CBS-15A-DP-TC230	230
CBS-20A-DP-TC230	230
CBS-30A-DP-TC230	230
CBS-50A-DP-TC230	230

^{*}Features reverse polarity auto trip.









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)

Part # 121-710-1101/1

IUL Magnetic Circuit Breakers

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)
CBL-50A-SP	50
CBL-60A-SP	60
CBL-75A-SP	75
CBL-100A-SP	100

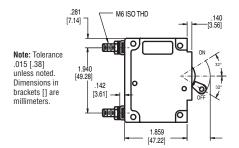
Double pole	Rating (A)
CBL-50A-DP	50
CBL-60A-DP	60
CBL-75A-DP	75
CBL-100A-DP	100

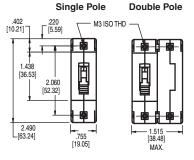
Triple pole	Rating (A)
CBL-80A-TP	80
CBL-100A-TP	100

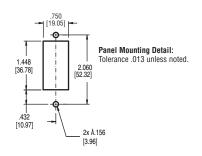




Compatible with BEP panels







Switches

We have expanded our line to cover all of your manual switch needs.

BEP Marine now offers a full line of manual switches including: toggle, rocker, push/pull, push-button, solenoids, and relays. The comprehensive selection ensures that BEP has the right switch to meet your needs. All of our switches are shock and weather resistant and built for harsh marine and industrial environments. In addition, common applications are associated with each style to simplify selection. BEP switches are available in the following classifications:



SPST

Single Pole, Single Throw:

- Turns a single circuit on and off
- One input and one output terminals



SPDT

Single Pole, Double Throw:

- Turns one of two circuits on and off
- One input and two output terminals



DPST

Double Pole, Single Throw:

- · Turns two circuits on simultaneously
- Two input and two output terminals
- Each input terminal has a dedicated output terminal



DPDT

Double Pole, Double Throw:

- Turns one circuit in each of two pairs of circuits
- Two input and four output terminals
- Enables different modes of operation on a circuit

Action	Style	Primary Use
SPST	Off-On	Lights
SPST	Off-(On)	Horn
SPDT	On-Off-On	Nav Lights
SPDT	(On)-Off-On	Bilge Pump
SPDT	On-Off-(On)	Bilge Pump
SPDT	(On)-Off-(On)	Trim Tabs
SPDT	On-On	Hallway Lights

Action	Style	Primary Use
DPST	Off-On	Nav Lights
DPST	Off-(On)	Dual Horns
DPDT	On-Off-On	Nav Lights
DPDT	(On)-Off-On	Dual Wipers
DPDT	On-Off-(On)	Dual Wipers
DPDT	(On)-Off-(On)	Hatches
DPDT	On-On	Hallway Lights



49

Contura Switches

- Shock and weather resistant for use in harsh marine and industrial environments
- Compatible with 12V and 24V systems, rated for up to 20A (12V)
- Standard or illuminated actuators
- Mount in BEP Rocker/Contura switch brackets

Ideal for:

Interior and Exterior Lighting

Trim Tabs

Power Hatches

Horns

Wipers

			_	_		Dimmer
						Roori tox
Part #	1001801	1001802	1001803	1001805	1001804	1001806
Туре	SP	ST	SPDT			
Action	Off-On	Off-(On)	On-Off-On	On-Off-(On)	(On)-Off-(On)	(On)-Off-(On)
Nominal Voltage	12V/24V DC					
Ratings	20A at 12V DC, 15A at 24V DC					
Termination Type	1/4" blades					
LED	1-Amber	None	2-Amber	1-Amber	None	None

Part #	1001811	1001810	1001812	1001808	1001807	1001809
Туре	DF	ST	DPDT			
Action	Off-On	Off-(On)	On-On	On-Off-On	On-Off-(On)	(On)-Off-(On)
Nominal Voltage	12V/24V DC					
Ratings	20A at 12V DC, 15A at 24V DC					
Termination Type	1/4" blades					
LED	1-Amber	None	2-Amber	2-Amber	1-Amber	None

() = Momentary

Contura and Rocker Switch Mounting Brackets

- Mount multiple Contura or Rocker style switches in one opening
- Provides a neat, finished appearance on dash or panel surfaces



Rocker Switches

- Shock and weather resistant for use in harsh marine and industrial environments
- Available in 12V and 24V system configurations
- 10A, 20A, and heavy-duty 25A (12V) rated options
- · Standard and illuminated actuators

Ideal for:

Interior and Exterior Lighting

Horns

Wipers

Trim Tabs

Power Hatches

Part #	1001705	1001707	1001708	1001714	1001716	1001704	1001709
Туре				SPST			
Action	Off-On	Off-On	Off-On	Off-On	Off-On	Off-On	Off-(On)
Nominal Voltage	12V DC	12/24V DC	12V DC	12V DC	12V DC	12/24V DC	12V DC
Ratings	10A at 12V DC	20A at 12V DC, 10A at 24V DC	25A at 12V DC	25A at 12V DC	25A at 12V DC	20A at 12V DC, 15A at 24V DC	25A at 12V DC
Termination Type	1/4" blades	#8-32 screws	#8-32 screws	1/4" blades	1/4" blades	1/4" blades	1/4" blades
LED	Red	None	Red	Red	Changeable	None	None

	down arm	m Signature and the state of th		11.22 TO 12.22 TO 12.		
Part #	1001706	1001710	1001715	1001711	1001712	1001713
Туре		SP	DT		DP	DT
Action	On-On	On-Off-On	On-Off-On	(On)-Off-(On)	On-Off-On	(On)-Off-(On)
Nominal Voltage	12V DC	12V DC	12V DC	12V DC	12V DC	12V DC
Ratings	10A at 12V DC	25A at 12V DC	25A at 12V DC	25A at 12V DC	25A at 12V DC	25A at 12V DC
Termination Type	1/4" blades	1/4" blades	1/4" blades	1/4" blades	1/4" blades	1/4" blades
LED	None	None	2-Red	None	None	None

() = Momentary

Contura and Rocker Switch Mounting Brackets

- Mount multiple Contura or Rocker style switches in one opening
- Provides a neat, finished appearance on dash or panel surfaces



1001718 Plug



1001717 Single



1001703 End (L or R)



1001702 Double



1001701 Triple (plug included)

5′

Contact Switches

- Universal applications for marine and industrial environments
- Choose from red or black actuator styles

Part # 1001401 1001402 SPST Type Off-(On) Off-(On) Action Nominal Voltage 12V DC 12V DC 10A at 12V DC 10A at 12V DC Ratings **Termination Type** 1/4" blades 1/4" blades **Button Color** Red Black

() = Momentary

Ideal for:

Horns

Other Momentary Applications

Push Button Switches and Caps

- Offered in a variety of weather resistant options to suit any application environment
- Suitable for 6–36V system configurations with up to 35A ratings (12V)
- Momentary actuation ideal for use with horns
- $\bullet \ \ \text{Optional weather proof rubber caps available with threaded or press-on installation}$

Ideal for: Horns

Part #	1001503	1001504	1001505	1001506	1001507	1001508
Туре			SP	ST		
Action	Off-(On)	Off-(On)	Off-(On)	Off-(On)	Off-(On)	Off-(On)
Nominal Voltage	6-36V DC	6-36V DC	6-36V DC	6-36V DC	6-36V DC	6-36V DC
Ratings	10A at 12V DC	35A at 12V DC	10A at 12V DC	10A at 12V DC	35A at 12V DC	35A at 12V DC
Termination Type	#8-32 screws	#8-32 screws	#8-32 screws	wire leads, 16 AWG, 8"	#8-32 screws	#8-32 screws

() = Momentary

Push Button Caps



1001502

Screw Fit





1001509 Screw Fit



1001501 Press Fit

Toggle Switches

- Shock and weather resistant for use in harsh marine and industrial environments
- · Available in 12V and 24V system configurations
- 10A and heavy-duty 25A (12V) rated options
- · Standard or illuminated actuators

Ideal for:

Interior and Exterior Lighting

Horns

Wipers

Trim Tabs

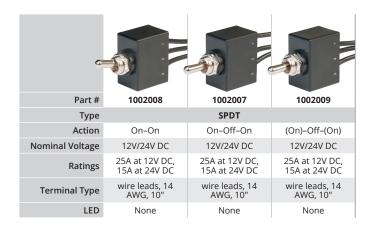
Power Hatches

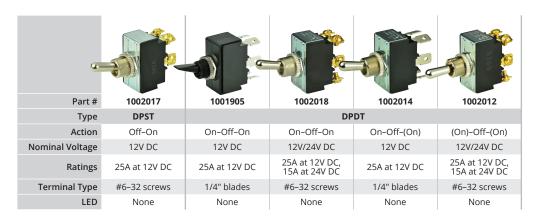




					NEW		
Part #	1001907	1001903	1001904	1002001	1002027	1002015	1002004
Туре				SPDT			
Action	On-Off-On	On-Off-On	(On)-Off-(On)	On-Off-On	On-Off-On	On-Off-(On)	(On)-Off-(On)
Nominal Voltage	12V DC	12V/24V DC	12V/24V DC				
Ratings	25A at 12V DC	25A at 12V DC, 15A at 24V DC	25A at 12V DC, 15A at 24V DC				
Terminal Type	1/4" blades	#6-32 screws	#6-32 screws	1/4" blades	#6-32 screws	#6-32 screws	#6-32 screws
LED	Red	None	None	None	None	None	None

() = Momentary





Sealed Dipped Switches



() = Momentary

Toggle Switch Boots

- UV resistant, resists cracking and discoloration
- Full boot provides maximum protection. IP67 rated, will withstand saltwater and fresh water immersion up to 30 min.
- Tipless boot provides increase weather resistance while retaining the look of the stainless actuator



1002019 Tipless



1002020

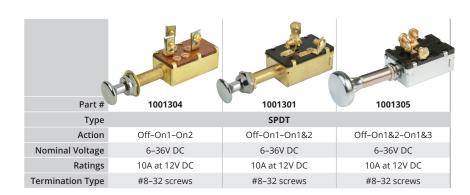
Push-Pull Switches

- Push-Pull switches are well suited for managing a variety of single or multiple circuit lighting applications
- Shock and weather resistant for use in harsh marine and industrial environments
- Suitable for 6–36V system configurations with up to 10A ratings (12V)

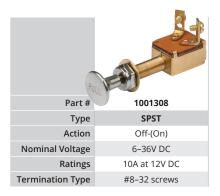
Ideal for:

Single or multiple circuit lighting applications

Part #	1001306	1001302	1001303	1001307
Туре		SP	ST	
Action	Off-On	Off-On	Off-On (two circuit)	Off-On
Nominal Voltage	6-36V DC	6-36V DC	6-36V DC	6-36V DC
Ratings	10A at 12V DC	10A at 12V DC	10A at 12V DC	10A at 12V DC
Termination Type	wire leads, 16 AWG, 8"	#8-32 screws	#8-32 screws	#8-32 screws



Pull Switch





Ignition Switches

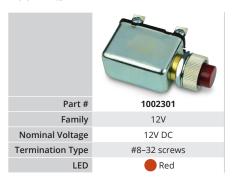
- Available in a variety of Off/On/Accessory/Ignition configurations to suit specific applications
- Suitable for 6–36V DC system configurations
- All ignition switches include 2 keys

Part #	1001605	1001608	1001606	1001607
Action	Off-On	Off-On	Off-Ignition-Start	Off–Ignition & Accessory–Start
Nominal Voltage	12V DC	12V DC	12V DC	12V DC
Ratings	Ignition 10A at 12V DC	5A at 12V DC	Ignition 10A, Start 5A at 12V DC	Ignition 10A, Start 5A at 12V DC
Termination Type	#8-32 screws	#8-32 screws	#8-32 screws	#8-32 screws

D. 1 11				
Part #	1001610	1001604	1001603	1001609
Action	Off-Ignition-Start	Off-Ignition & Accessory-Start	Accessory–Off–Ignition & Accessory–Start	Accessory–Off–Ignition & Accessory–Start
Nominal Voltage	6-36V DC	12-48V DC	12/12V DC	12V DC
Ratings	15A Ignition, 5A Start	10A at 12V DC, 5A at 24V DC, 3A at 36V DC, 2A at 48V DC	10A at 12V DC, 5A at 24V DC	Accessory 10A, Ignition 5A, Start 5A at 12V DC
Termination Type	#8-32 screws	Deutsch Connector (included)	Deutsch Connector (included)	#8-32 screws

Alarm

- A convenient way to add alarm functionality to your dash or panel
- Buzzer sounds and bright red light illuminates when voltage is present
- For use with temperature, oil pressure, and engine warning alarm kits



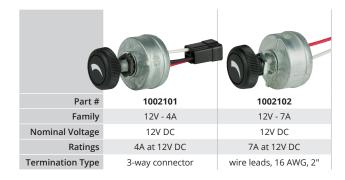
Master Disconnect

- Compact lever-operated battery disconnect switch
- Rated for 175A for use in 12V DC systems
- Suitable for 6–36V DC system configurations
- Includes face plate



Dimmer Switches

- Easily control the brightness of incandescent bulbs from dim to bright
- · Not intended for use with LED lights



Kill Switch

- Ideal for adding engine-stop safety to older boats
- Available as a switch & lanyard combo, or replacement lanyard only





LED Pilot Indicator

- This 12V solid-state LED never needs replacement
- Feature bright chrome-plated body, washer and hex nut
- Polarized quick connect terminals for ease of wiring
- Available in Amber, Red, Green, and Blue

Part #	1001101	1001102	1001103	1001104
Family	12V	12V	12V	12V
Nominal Voltage	12V DC	12V DC	12V DC	12V DC
Termination Type	1/4" blades	1/4" blades	1/4" blades	1/4" blades
LED	Amber	Blue	Green	Red

Solenoids

- $\bullet \ \ \text{Remotely switch high amperage loads with a low amperage on-off switch} \\$
- Rated from 65A up to 100A for use in 12V DC systems
- Available with steel and PVC coated housings

Part #	1002203	1002205	1002204
Family	Remote Switching	PVC Coated	Remote Switching
Nominal Voltage	12V DC	12V DC	12V DC
Ratings	65A at 12V DC	85A at 12V DC	85A at 12V DC
Termination Type	10–32 thread and 5/16–24 thread	10–32 thread and 5/16–24 thread	10–32 thread and 5/16–24 thread
Amperage	65A	85A	85A

Part #	1002206	1002201	1002202
Family	Engine Starting	Motor Reversing	Solid State
Nominal Voltage	12V DC	12V DC	9-31V DC
Ratings	100A at 12V DC	75A at 12V DC	85A at 12V DC
Termination Type	5/16"-24 thread	5/16–24 thread & 1/4 blade	5/16–18 thread & wire leads, 16 AWG, 8"
Amperage	100A	75A	85A

POWER DISTRIBUTION PANELS

Switch Panels



A range of switch panels for interior and exterior use, choices with and without in-built circuit protection.

Switches

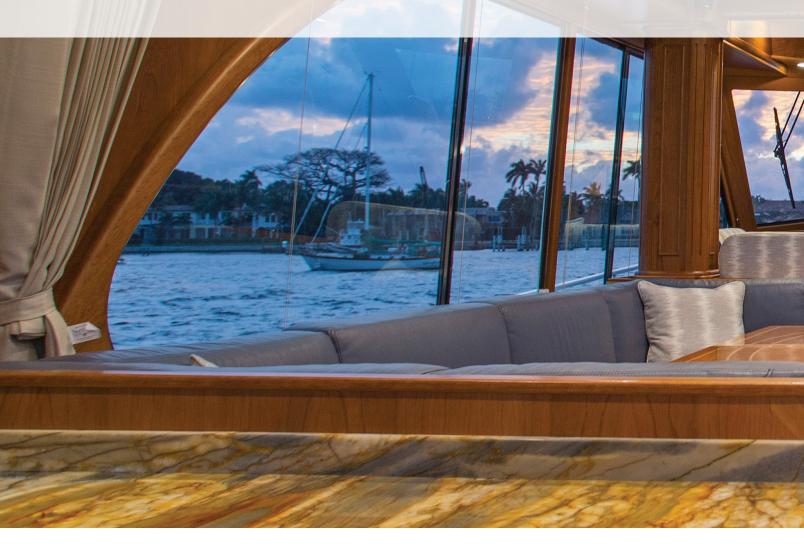


Switch options for interior and exterior including high quality waterproof stainless steel push buttons with LED status.

Custom Panel & Design Services



Custom Panels 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.



POWER DISTRIBUTION PANELS

DC Circuit Breaker Panels



Off-the-shelf solution for controlling your vessel or vehicle's DC system with quality panels which include backlighting and circuit on status. Monitoring options range from basic analog metering, through to full systems in operation and tank monitoring.

AC Circuit Breaker Panels



Complimentary to the standard DC Panels, these AC circuit break panels cover systems ranging from four outputs through to multiple inputs and 16 output circuits. Monitoring options range from analog through to comprehensive digital meters.

Circuit Breaker Panel Labels



ACCESSORIES

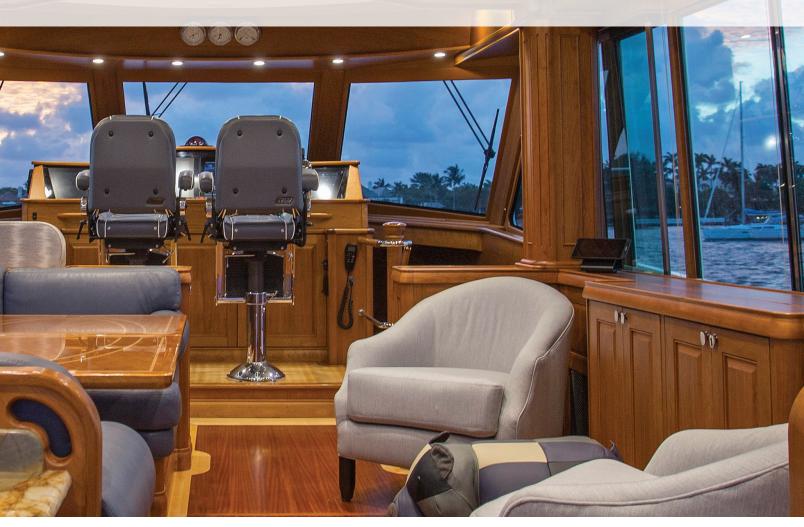








Standard labels sets for circuit breaker panels, switch panels and for battery.



CG2-4W

Contour Generation II Switch Panels

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 overshot 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 81)



Switches	Color	Fuses	Label Set #	Part #
2	Charcoal	No	SET-G2-1	CG2-2W
2	Charcoal	1	SET-G2-1	CG2-2W-F
4	Charcoal	No	SET-G2-1	CG2-4W
4	Charcoal	2	SET-G2-1	CG2-4W-F
6	Charcoal	No	SET-G2-1	CG2-6W
6	Charcoal	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



CG2-JB

. CG2-2W

Spare Switches for Contour Generation II

Part #	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

Related Products



Waterproof Series Panels

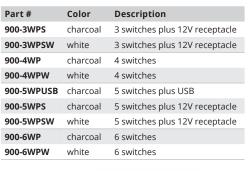
- · Compact panel size
- · Sprayproof inline fuse holders with fuses included
- Waterproof power receptacles (16A) in 3- and 5-way models
- Waterproof to IP56
- Switches rated at 20A DC
- LxWxH is 3.75" x 4.25" x 2.9" (95 x 107 x 75 mm)
- · Panel supplied with label LBL-WP

OCKPIT	Name of the last
OCKPIT	GATION GHTS
COCKPIT	
LIGHTS	CKPIT
	GHTS
	CKPIT

900-4WP



900-6WPW





900-5WPUSB

Related Products



Label Sets page 79

Micro Series Panels

- · 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" x 2.3" x 1.2" (86 x 58 x 28 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 - Part # SB1-FS)

Related Products



page 81

Contour Switch Panels

- CSP6-PTC(W) uses the latest in overload protection technology— Positive Temperature Coefficient
- Green LED backlit labels; red systems on indicator
- Switches rated 20A DC
- Removable cover plates conceal screws & water drain
- · Label set SET-1SP included
- **CSP6(W)** Includes six switches unfused for installation where separate fused supply is available.
- CSP6-F(W) Includes six switches and three inline fuse holders with fuses behind panel.
- **CSP6-PTC(W)** 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!

Part # charcoal	Part # white	Fuses	PTC	LxWxH	Label Set #
CSP6	CSP6W	No	No		
CSP6-F	CSP6-FW	3	No	6.25" x 4.4" x 2.5" 158 x 112 x 64 mm	SET-1SP
CSP6-PTC	CSP6-PTCW	No	6	130 X 112 X 04 IIIIII	



Related Products



Label Sets page 79

Spare Parts for Waterproof, Micro and Contour Switch Panels



Toggle Switches

Part #	Operation
SW-32111	on/off
SW-32113	on/on
SW-32114	on/off/on
SW-32115	(on)off/momentary
SW-32120	(on)off(on) momentary
SW-32123	on/off/on double pole



Splash Proof Boot sw-M331



SeaLink® Deluxe Dual USB Charger Receptacles

- 12V to 24V DC input
- 5V, 2.1 amp total output
- LED power indicator light for USB
- Water resistant cover protects against dust and water

Part #	12VDUSB	black (with insulated terminals)
OEM#	12VDUSB-B	black
OEM#	12VDUSBN-B	black no LED
OEM#	12VDUSBW-B	white



Deluxe 12V Plug & Receptacle



Contour Interior 1000 Series Switch **Panels**

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 set sheet # SET-1000
- Maximum panel load 50A



1000-VM-12V	Voltmeter
-------------	-----------

1000-AM50 Ammeter

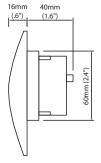
1000-6W **Switch Panel**

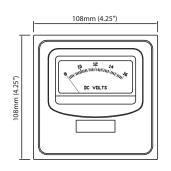
Description	Part #
10A Ammeter (internal shunt)	1000-AM10
20A Ammeter (internal shunt)	1000-AM20
50A Ammeter (external shunt, supplied)	1000-AM50
12 Volt Systems	1000-VM-12V
24 Volt Systems	1000-VM-24V
DC Systems Monitor	1000-DCSM
AC Systems Monitor	1000-ACSM

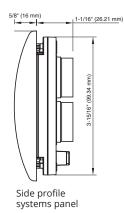
Now available with digital AC and DC systems monitors

Part #	Switches	Fuses	Voltage	
1000-6W	6	6x 15A	12	
1000-6W-24V	6	6x 15A	24	











Related Products



Contour 1100 Series Switches

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 set.

Related Products



Part #	1100-BK
Interior/Exterior	Interior
Single/Double	Single
Rated	10A
LxWxH	2.4" x 1.2" x 0.75" 60 x 30 x 18 mm

Replacement and/or different Operational Switch

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

3.6" x 1.2" x 0.75"

91 x 30 x 18 mm



3.6" x 1.2" x 0.75"

91 x 30 x 18 mm

12V & 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
- · Warning buzzers flash red on alarm



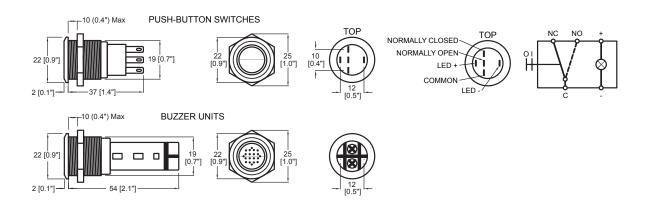


12V

Description	Color	Part #	OEM#
Latching On/Off	Red	80-511-0001-00	80-511-0001-01
Latching On/Off	Blue	80-511-0003-00	80-511-0003-01
Latching On/Off	Green	_	80-511-0011-01
Momentary (On)/Off	Red	80-511-0002-00	80-511-0002-01
Momentary (On)/Off	Blue	80-511-0004-00	80-511-0004-01
Momentary (On)/Off	Green	_	80-511-0012-01
Buzzer	Red	80-511-0009-00	80-511-0009-01

24V

Description	Color	Part #	OEM #
Latching On/Off	Red	80-511-0005-00	80-511-0005-01
Latching On/Off	Blue	80-511-0007-00	80-511-0007-01
Momentary (On)/Off	Red	80-511-0006-00	80-511-0006-01
Momentary (On)/Off	Blue	80-511-0008-00	80-511-0008-01
Buzzer	Red	80-511-0010-00	80-511-0010-01



Connection Cable

This 12" (300 mm) cable simply pushes onto the back of the push button switches and features 0.8 mm 2 / 18g cables for switch and backlight connections that comply with ISO/ABYC. Other end is stripped wire for easy connection.

Part # 80-511-0031-00 OEM # 80-511-0031-01



Custom Panel & Design Services

BEP offers a wide range of standard AC and DC Circuit Breaker Panels. Whether customers require some minor modification to a standard panel, a custom selection of breakers and meters, or a completely tailored circuit design and battery switch panel, BEP can deliver a solution.



Custom Panel Selection

Easy 4 Step Process

Custom Panel Selection is simple and effective. The customer will need to define which selection of Panel Sections are required for the system. Panel layout will define the relative location of each Panel Section type in a simple grid. Breaker ratings, load groups or meter sources will then need to be defined within each Panel Section.

Pick Panel Section Types

Breaker & Meter panels can vary between AC or DC and 110 or 230 volt systems. Each Panel Section holds four or six breakers per block or a single meter.















Panel Layout

Panel Sections can be assembled in a grid layout and will vary based on the layout and the number of Panel Section blocks required.

Blanks can be used to even up rows or columns, or can feature additional custom requirements from indicator lights to switches.

Residual Current Circuit Breaker and Overcurrent Protection (RCBO) and Ship-to-Shore slide selection can also be added.



OR



DC **Breaker** AC Meter

Breaker

 AC

Breaker

AC

Ship-to-

OR

Blank AC Breaker

 AC

Breaker

Blank DC Breaker

DC Breaker Breaker

DC Breaker

D(Meter DC <u>Breaker</u> DC

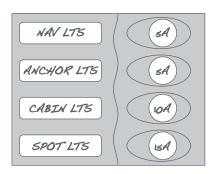
> DC Breaker

Breaker

Define Breaker Ratings Positions & Load Groups

Each four or six breaker panel can hold any combination of required amperage ratings and source load groups.

Contact your BEP Agent with your Panel Layout and Circuit Drawings. BEP will then confirm pricing, breaker panel drawings and estimated lead time for your consideration.





Panel Design Services

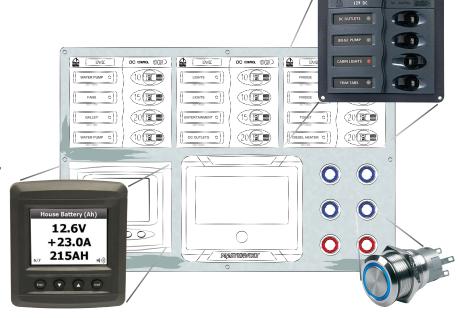
For a completely tailored product based on your needs

For specific requirements, we can develop a customized breaker and battery panel solution that will ensure your installation meets your customers' exact requirements.

Specifications & Ordering

Once you have developed a wiring diagram or illustration of the requirements for your installation, contact your BEP agent to discuss your individual requirements and specifications. A comprehensive layout and drawing will be developed, with pricing and estimated lead time to be presented for your consideration.

To help guide your design, BEP features a number of common custom requirements for consideration.



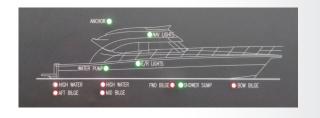
Battery Management & Circuit Breaker Panels

Large area panels can often hold a custom selection of circuit breakers, RCDs, battery switches and more. Sizes can range from small traditional sizes up to a maximum of 2 metres.



Adding a mimic panel

Mimic panels or simple indicator lights can be added to illustrate circuit activation or warnings.



Professionally cut to shape

Panels are not always traditional and square. We have the capability to design any number of complex shapes, ideal if you have a tight or non-traditional space to work with, or you simply desire different aesthetics in your installation.



Custom switch locations graphics

Customized switch types

and locations with tailored graphics, logos and labels can be supplied complete with wiring harness based on your specification ready for immediate installation.



Non-panel

Our team have a broad range of capability and can develop customised wired solutions or components for your installation.



DC Circuit Breaker Panels—No Meters

- · Red systems on LED
- 12V (24V Backlighting Upgrade Kits on page 69)
- Marine grade powder coated aluminium
- · ABYC standard voltage indication
- Green LED backlit labels
- Stylish clip on contour fascia
- Label set(s) and busbar supplied with panels
- Depth for mounting 2.5" (64 mm) all panels



Maximum Amperage Explained

To reach the 160A maximum stated amperage rating each copper bus on rear of DC Panel requires a separate 16 mm² / 6 AWG feed cable that is attached to center of the bus bar i.e. on a 16 circuit breaker panel with a single bus the feed cable should be attached between circuit breakers #8 and #9.









Part #	900-DC	901H	901V	902NMH
Total Positions	4 Loads	8 Loads	8 Loads	12 Loads
Circuit Breakers (single pole)	1x 5A, 2x 10A, 1x 15A	2x 5A, 2x 10A, 3x 15A, 1x 20A	2x 5A, 2x 10A, 3x 15A, 1x 20A	3x 5A, 4x 10A, 4x 15A, 1x 25A
Nominal Voltage	12V*	12V*	12V*	12V*
Maximum Amperage	80A	160A	160A	100A
HxWx2.5" HxWx65 mm	4.5" x 5" 115 x 127 mm	4.5" x 9.75" 115 x 239 mm	7.9" x 5" 200 x 127 mm	4.5" x 13.9" 115 x 351 mm
Neg Bus	6-way	6-way	6-way	6-way
Label Sheet	1	1	1	1

*24V Backlighting Upgrade Kits on page 69.

Related Products

ACCESSORIES

Label Sets page 77-78







Part #	902NMV	904NM	904NMH
Total Positions	12 Loads	16 Loads	16 Loads
Circuit Breakers (single pole)	3x 5A, 4x 10A, 4x 15A, 1x 25A	4x 5A, 5x 10A, 5x 15A, 1x 20A, 1x 25A	4x 5A, 5x 10A, 5x 15A, 1x 20A, 1x 25A
Nominal Voltage	12V*	12V*	12V*
Maximum Amperage	160A	160A per bus	80A per bus
HxWx2.5" HxWx65 mm	11.25" x 5" 285 x 127 mm	7.9" x 9.75" 200 x 239 mm	4.5" x 18.25" 115 x 463 mm
Neg Bus	6-way	12-way	12-way
Label Sheet	1	1	1

Cutout size - 3/8" (10 mm) inside all external edges. For more information on circuit breaker panels go to **bepmarine.com**

24V Backlighting Upgrade Kits

For changing 12V panels to 24V backlighting.

# of Circuits	Part #
4-way	RES-4WAY
8-way	RES-8WAY
12-way	RES-12WAY
16-way	RES-16WAY

# of Circuits	Part #
20-way	RES-20WAY
24-way	RES-24WAY
28-way	RES-28WAY
32-way	RES-32WAY

Part#
RES-36WAY
RES-44WAY
RES-56WAY







Part #	904NMV	905NM	905NMV
Total Positions	16 Loads	24 Loads	24 Loads
Circuit Breakers (single pole)	3x 5A, 4x 10A, 4x 15A, 1x 25A	5x 5A, 8x 10A, 8x 15A, 1x 20A, 1x 25A, 1x 30A	5x 5A, 8x 10A, 8x 15A, 1x 20A, 1x 25A, 1x 30A
Nominal Voltage	12V*	12V*	12V*
Maximum Amperage	160A	160A per bus	160A per bus
HxWx2.5" HxWx65 mm	14.6" x 5" 370 x 127 mm	7.9" x 13.9" 200 x 351 mm	11.25" x 9.75" 285 x 239 mm
Neg Bus	6-way	12-way	12-way
Label Sheet	1	1-3	1-3

*24V Backlighting Upgrade Kits above.







Part #	906NMH	906NMV	NC36NM
Total Positions	32 Loads	32 Loads	36 Loads
Circuit Breakers (single pole)	7x 5A, 11x 10A, 11x 15A, 1x 20A, 1x 25A, 1x 30A	7x 5A, 11x 10A, 11x 15A, 1x 20A, 1x 25A, 1x 30A	8x 5A, 12x 10A, 12x 15A, 2x 20A, 1x 25A, 1x 30A
Nominal Voltage	12V*	12V*	12V*
Maximum Amperage	160A per bus	160A per bus	160A per bus
HxWx2.5" HxWx65 mm	7.9" x 18.25" 200 x 463 mm	14.6" x 9.75" 370 x 239 mm	11.25" x 13.9" 285 x 351 mm
Neg Bus	24-way	24-way	24-way
Label Sheet	1–4	1-4	1–4, 6

DC Circuit Breaker Panels—With Digital/Analog Monitoring

- All panels are available with either Analog or Digital meters
- 12V (24V Backlighting Upgrade Kits on page 69)
- Label set(s) and busbar supplied with panels
- Depth for mounting 2.5" (64 mm) all panels









Part #	900V-DCSM	900-AM	901V-DCSM	901V-AM	902-1	DCSM	902-AM	90	02V-DCSM	902V-AM
Meter	digital	analog	digital	analog	dig	gital	analog		digital	analog
Total Positions	4 Lo	ads	8 Lo	oads		12 Loa	ds		12 Lo	ads
Circuit Breakers (single pole)	1x 5A, 2x 10	0A, 1x 15A	2x 5A, 2x 10A,	3x 15A, 1x 20A	3x 5A	A, 4x 10A, 4x	15A, 1x 25A	3>	< 5A, 4x 10A, 4	x 15A, 1x 25A
Nominal Voltage	12V*		12V*		12V*			12V*		
Maximum Amperage	80A		160A		160A/80A buses			160A		
HxWx2.5" HxWx65 mm	7.9" x 5" 200 x 127 mm			11.6" x 5" 295 x 127 mm		7.9" x 9.75" 200 x 239 mm		15" x 5" 380 x 127 mm		-
Neg Bus	6-w	ay	6-1	way		6-way			6-wa	ау
Label Sheet	1			1		1			1	

*24V Backlighting Upgrade Kits on page 69.









Part #	904-DCSM	904-AM	903-DCSM	903-AM	-	905-DCSM	905-AM	905	5V-DCSM	905V-AM
Meter	digital	analog	digital	analog		digital	analog		digital	analog
Total Positions	16 Lo	oads	20 Lo	oads		24 Lo	ads		24 Lo	ads
Circuit Breakers (single pole)	4x 5A, 5x 10 1x 20A,		5x 5A, 6x 10A, 7 1x 3			5x 5A, 8x 10A, 8 1x 25A, 1			5x 5A, 8x 10 x 20A, 1x 2	
Nominal Voltage	12\	/ *	12\	/ *		12V	*		12V	*
Maximum Amperage	160A p	er bus	160A/80A/1	60A buses		160A pe	er bus		160A pe	er bus
HxWx2.5" HxWx65 mm	11.6" x 295 x 23		7.9" x 200 x 3!			11.6" x 295 x 35			15" x 9 380 x 23	
Neg Bus	12-v	vay	12-v	vay		12-w	ray		12-w	ay
Label Sheet	1-	2	1–	3		1-3	3		1-3	3

*24V Backlighting Upgrade Kits on page 69.







Part #	906-DCSM	906-AM	906	6V-DCSM	906V-AM		907-AM	
Meter	digital	analog	(digital	analog		analog	
Total Positions	32 Lo	ads		32 Lo	oads		48 Loads	
Circuit Breakers (single pole)	7x 5A, 11x 10A, 1 1x 25A,		7x 5	A, 11x 10A, 1 1x 25A,	11x 15A, 1x 20A, 1x 30A	12	2x 5A, 15x 10A, 15x 15A, 3x 2 1x 25A, 2x 30A	.0A,
Nominal Voltage	12V	/ *		12\	V*		12V*	
Maximum Amperage	160A pe	er bus		160A p	er bus		160A per bus	
HxWx2.5" HxWx65 mm	11.6" x ⁻ 295 x 46			18" x 455 x 23			15" x 18.25" 380 x 463 mm	
Neg Bus	24-w	ay		24-v	vay		2 x 24-way	
Label Sheet	1-4	4		1-	4		1-5	

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 12V or 24V configuration. All part numbers shown are 12V backlighting. Order upgrade kits to suit number of breakers in panel. See page 69 for upgrade part number.

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

Related Products



Ammeters page 91

Related Products

Accessories

Label Sets
page 77–78

Cruiser Series DC Branch Circuit Breaker Panels

- 12V / 24V
- Mimic panel for quick reference of systems in operation
- · Blank space for addition of extra meter
- · Digital or analog readouts
- Depth for mounting 2.5" (64 mm) all panels





Part #	NC32Y-DCSM	NC32Y-AM	N	C36L-DCSM	NC36L-AM			
Meter	digital	analog		digital	analog			
Total Positions	32 Lo	oads		36 Loads				
Circuit Breakers (single pole)	7x 5A, 11x 10 1x 20A, 1x 2			8x 5A, 12x 10A, 12x 15A, 2x 20A, 1x 25A, 1x 30A				
Nominal Voltage	12V or		12V or 24V*					
Maximum Amperage	160A p		160A per bus					
HxWx2.5" HxWx65 mm				15" x 13.9" 380 x 351 mm				
Neg Bus	vay		24-	way				
Label Sheet	1-4	1–4, 6						

Related Products ACCESSORIES Label Sets page 77-78

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.

Double Pole Panels

- Double pole panels available in all panel sizes.
- Double pole CBs use twice the space of single pole breakers; an 8-load single pole panel will become 4-Load when using double pole circuit breakers
- AC or DC versions available
- · Single toggle



904NM-DP

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

Millennium Series DC Branch Circuit Breaker Panels

- 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)
- Depth for mounting 2.5" (64 mm) all panels







Part #	M28-DCSM	M32-DCSM	M44-DCSM
Meter	digital	digital	digital
Total Positions	28 Loads	32 Loads	44 Loads
Circuit Breakers (single pole)	8x 5A, 8x 10A, 8x 15A, 2x 20A, 2x 30A	7x 5A, 11x 10A, 11x 15A, 1x 20A, 1x 25A, 1x 30A	10x 5A, 14x 10A, 14x 15A, 3x 20A, 1x 25A, 2x 30A
Nominal Voltage	12V or 24V*	12V or 24V*	12V or 24V*
Maximum Amperage	160A per bus	160A per bus	160A per bus
HxWx2.5" HxWx65 mm	14.6" x 9.75" 370 x 239 mm	11.25" x 13.9" 285 x 351 mm	14.6" x 13.9" 370 x 351 mm
Neg Bus	24-way	24-way	24-way
Label Sheet	1–4	1–4, 6	1–4, 6





Part #	M44H-DCSM	M56-DCSM
Meter	digital	digital
Total Positions	44 Loads	56 Loads
Circuit Breakers (single pole)	10x 5A, 14x 10A, 14x 15A, 3x 20A, 1x 25A, 2x 30A	12x 5A, 18x 10A, 18x 15A, 4x 20A, 2x 25A, 2x 30A
Nominal Voltage	12V or 24V*	12V or 24V*
Maximum Amperage	160A per bus	160A per bus
HxWx2.5" HxWx65 mm	11.25" x 18.25" 285 x 463 mm	18" x 13.9" 455 x 351 mm
Neg Bus	24-way	2x 24-way
Label Sheet	1–4, 6	1–4, 6

Related Products

ACCESSORIES

Label Sets page 77-78

AC Main Circuit Breaker Panels—No Meters

- Ideal for AC shore power installations and on board inverter installations
- For standard twin input systems, eg: one shore power and one genset input
- Depth for mounting 2.5" (64 mm) all panels









Part #	900-ACM2W-110V	900-ACM2W	900	0-ACM6W-110V	900-ACM6W	9	00-AC1-110V	900-AC1	90	0-ACCH-110V	900-ACCH
Nominal Voltage	110V AC	230V AC		110V AC	230V AC		110V AC	230V AC		110V AC	230V AC
Total Positions	2 Loads + 1	1 Input		6 Loads +	+ 1 Input		4 Loads +	2 Inputs		2 Input Se	elector
Circuit Breakers (single + double pole)	2x 15A + 1x 30A	2x 10A + 1x 20A		x 15A, 2x 20A, x 25A + 1x 30A	2x 10A, 3x 15A, 1x 20A + 1x 20A	2)	15A, 2x 20A + 2x 30A	2x 10A, 2x 15A + 2x 20A		2x 30A	2x 15A
Maximum Amperage	30A	20A		30A	20A		30A	20A		30A	15A
HxWx2.5" HxWx65 mm	4.5" x 5 115 x 127			7.9" 200 x 1	··· -		4.5" x 115 x 23			7.9" x 200 x 127	~
Neg Bus	IS-6MM	IS-6MM-2		IS-6MM-2			IS-6M	M-2		IS-6MN	1-2
Label Sheet	5			5	i		5			5	



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.

See page 47 for more details

AC Main Circuit Breaker Panels—Analog/Digital

- All available in 110V/60 Hz or 230V/50 Hz
- All supplied with tranducers
- 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







Part #	900-ACM2-AM-110	900-ACM2-AM	900-ACM6V-AM-110	900-ACM6V-AM	900-AC2H-AM-110	900-AC2H-AM	
Nominal Voltage	110V AC	230V AC	110V AC	230V AC	110V AC	230V AC	
Meter	analog	analog	analog	analog	analog	analog	
Total Positions	2 Loads +	1 Input	6 Loads +	1 Input	8 Loads +	2 Inputs	
Circuit Breakers (single + double pole)	2x 15A + 1x 30A	2x 10A + 1x 20A	3x 10A, 2x 15A, 1x 20A + 1x 30A	2x 10A, 3x 15A, 1x 20A + 1x 20A	2x 10A, 3x 15A, 2x 20A, 1x 25A + 1x 30A, 1x 50A	1x 5A, 3x 10A, 3x 15A, 1x 20A + 1x 20A, 1x 30A	
Maximum Amperage	30A	20A	30A	20A	50A	30A	
HxWx2.5" HxWx65 mm	7.9" x 5" 200 x 127 mm			11.6" x 5" 295 x 127 mm		7.9" x 9.75" 200 x 239 mm	
Neg Bus	IS-6MM-2		IS-6M	IS-6MM-2		2x6-way	
Label Sheet	5		5	5		5	







Part #	900-AC2H-ACSM-110	900-AC2H-ACSM	900-AC2V-AM-110	900-AC2V-AM	900-AC2V-ACSM-110	900-AC2V-ACSM	
Nominal Voltage	110V AC	230V AC	110V AC	230V AC	110V AC	230V AC	
Meter	digital	digital	analog	analog	digital	digital	
Total Positions	8 Loads +	2 Inputs	8 Loads +	2 Inputs	8 Loads +	2 Inputs	
Circuit Breakers (single + double pole)	2x 10A, 3x 15A, 2x 20A, 1x 25A + 1x 30A, 1x 50A	1x 5A, 3x 10A, 3x 15A, 1x 20A + 1x 20A, 1x 30A	1x 5A, 2x 10A, 3x 15A, 2x 20A, 1x 25A + 1x 30A, 1x 50A	1x 5A, 3x 10A, 3x 15A, 1x 20A + 1x 20A, 1x 30A	1x 5A, 2x 10A, 3x 15A, 2x 20A, 1x 25A + 1x 30A, 1x 50A	1x 5A, 3x 10A, 3x 15A, 1x 20A + 1x 20A, 1x 30A	
Maximum Amperage	50A	30A	50A	30A	50A	30A	
HxWx2.5" HxWx65 mm	7.9" x 9.75" 200 x 239 mm		15" x 5" 380 x 127 mm		15" x 5" 380 x 127 mm		
Neg Bus	2x6-way		2x6-way		2x6-way		
Label Sheet	5		5	5		5	







Part #	900-AC3-AM-110	900-AC3-AM	900-AC3-ASCM-110	900-AC3-ACSM	900-AC4-ACSM-110	900-AC4-ACSM
Nominal Voltage	110V AC	230V AC	110V AC	230V AC	110V AC	230V AC
Meter	analog	analog	digital	digital	digital	digital
Total Positions	12 Loads +	2 Inputs	12 Loads +	2 Inputs	16 Loads	+ 2 Inputs
Circuit Breakers (single + double pole)	3x 10A, 4x 15A, 3x 20A, 1x 25A, 1x 30A + 1x 30A, 1x 50A	1x 5A, 4x 10A, 5x 15A, 1x 20A, 1x 25A + 1x 20A, 1x 30A	3x 10A, 4x 15A, 3x 20A, 1x 25A, 1x 30A + 1x 30A, 1x 50A	1x 5A, 4x 10A, 5x 15A, 1x 20A, 1x 25A + 1x 20A, 1x 30A	5x 10A, 7x 15A, 2x 20A, 1x 25A, 1x 30A + 1x 30A, 1x 80A	1x 5A, 5x 10A, 7x 15A, 2x 20A, 1x 25A + 1x 20A, 1x 50A
Maximum Amperage	50A	30A	50A	30A	80A	50A
HxWx2.5" HxWx65 mm	7.9" x 13.9" 200 x 351 mm		7.9" x 13.9" 200 x 351 mm		7.9" x 13.9" 200 x 351 mm	
Neg Bus	2x12-way		2x12-way		2x12-way	
Label Sheet	5		5		5	;

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

Related Products

ACCESSORIES

Label Sets page 77-78

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-FM1

BC-FM2

in HxWx3.5 mm HxWx90 **Cover Description**

Part #	Mount type	Cover Description	in HxWx3.5	mm HxWx90
BC-FM1	Flange	1 column 8-12 CBs + meter	15" x 5"	380 x 127
BC-FM2	Flange	2 column 8-12 CBs + meter	15" x 9.4"	380 x 239
BC-FM3	Flange	1 column 8-12 CBs	11.2" x 5"	285 x 127
BC-FM4	Flange	2 column 8-12 CBs	11.2" x 9.4"	285 x 239
BC-PM1	Panel	1 column 8-12 CBs + meter	14.2" x 4.2"	360 x 107
BC-PM2	Panel	2 column 8-12 CBs + meter	14.2" x 8.6"	360 x 219



Labels-Circuit Breaker Panels

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

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 NAV LT'S PORT NAV LIGHTS STARBOARD PANEL LIGHTS RADAR SALOON LIGHTS SSB START STERN 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 LAZERETTE LIGHT RADIO BATTERY SEARCH LIGHT STARBOARD START BATTERIES STEP LIGHT STROBE LIGHT TOILET LT

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 SUR MAIN SLIMP PLIMP 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

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**

AFT PEAK LIGHT

SFT-7N

VHF

WINCH

WIPER

AFT PEAK LIGHT DECK FLOOD LIGHTS **FWD DECK FLOOD LIGHTS 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 FORF DECKLIGHT FOCSLE LIGHT MAST FLOOD LIGHTS **FWD** MAST FLOOD LIGHTS AFT NET RECORDER NOT UNDER COMMAND SPARE **NUC LIGHTS**

PLOTTER

PORT FLOOD LIGHTS

STBD FLOOD LIGHTS

SHOWER LIGHTS

TOILET FAN TOILET LIGHT WINCH FLOOD LIGHTS

ANCHOR LIGHT

STOP

TRI LIGHT

SFT-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 STRD PORT ENGINE CONTROLS PORT IGNITION SAT COM SHOWER LIGHT SALOON LIGHTS SPARE **STABILIZER** STBD ENGINE CONTROLS STBD IGNITION TOILET LIGHT

WASTE TREATMENT

BOILER/HEATER

SFT-9N

WEATHER FAX

WINDEX LIGHT

WINDOW WASHERS

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** OII PLIMP 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

OUTLETS AFT ICE MAKER LOWER ICE MAKER LIPPER OUTLETS ENGINE ROOM OUTLETS STBD **OUTLETS EXTERNAL OUTLETS GALLEY OUTLETS LOWER DECK OUTLETS UPPER DECK** WATER HEATER

24-12V REDUCER

SET-12N 24-12V REDUCER AFRATOR 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 LUFFLIGHT MODEM NAV AREA FAN

OUTLETS FWD OUTLETS MID OUTLETS PORT PORT ENGINE STBD ENGINE

STEP LIGHTS STROBE RIDING LIGHT

ANCOR LIGHT

SET-A

ANCHOR LIGHT CARIN LIGHTS CABIN LIGHTS DC MAINS DISCHARGE DISCHARGE DISCHARGE **ELECTRONICS ELECTRONICS** FRIDGE HELM SUPPLY **INVERTER** MACERATOR MACERATOR

PORT ENGINE CONTROL PORT ENGINE CONTROL PUMP REFRIDGERATION STBD ENGINE CONTROL STBD ENGINE CONTROL

<STOP START> GENSET STOVE **TOILET** WASHER/DRYER WATER HEATER 12V BATTERY CHARGER

24V BATTERY CHARGER

VHF WIPER

AC OUTLETS GALLEY

SFT-B

PELMET LIGHTS

SOLAR PANEL

TV ANTENNA

STOVE

AC OUTLETS GALLEY AC OUTLETS PORT AC OUTLETS STBD **APPLIANCES** BAR-B-OUE BILGE PUMP AUTO/ MANUAL BLACK WATER PUMP CHART LIGHT **DECK LIGHTS ENGINE ALT** ELECTRIC TOILET **ENGINE ROOM BILGE** PLIMP GALLERY FRIDGE GAS DETECTOR GENSET HEATER INSTRUMENT LIGHTS LIGHTS PORT LIGHTS **RADIO** READING LIGHT SHOWER SUMP PUMP STBD LIGHTS STEREO UNDER FLOOR LIGHTS

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 BIJ GE ALARM PORT MID BILGE AUTO PORT MID BILGE MANUAL STRD 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

210KHZTX 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 AFT BILGE PUMP 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

24 HOUR CIRCUITS

SET-17N 24 HOUR CIRCUITS

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 GALIGES 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

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 PLIMP 24V BATTERY CHARGER 12V BATTERY CHARGER BILGE PLIMP PORT FWD BILGE PUMP PORT MID BILGE PUMP STBD AFT BILGE PUMP STBD FWD BILGE PUMP STBD MID **BOARDING PLATFORM BULWARK LIGHTS BUNK LIGHTS** CARLE 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 ENGINE ROOM MAIN FISH FINDER HOLDING TANK GAUGE **ICEMAKER** INVERTER/CHARGER LAKE WATER MASTER HEAD RCD RESET SALON LIGHTS SHAVER OUTLETS SOUNDER SPEED SUM LOG TOILET PORT TOIL FT STRD TV LIFT

WIND INSTRUMENTS

BOILER/HEATER

SET-22N

AIR CON FLYBRIDGE **ALARMS** CCTV COCKPIT FRIDGE COMMUNICATIONS CONTROL MAX 2.0 **DECK LIGHTS BLOWER** EARTH LEAKAGE LIGHTS **EMERGENCY PARALLEL 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 LIHE RADIO VHF RADIO

WHEELHOUSE LIGHTS

WINE COOLER

AIR CON FLYBRIDGE

AIRHANDLER SALOON

AIRHANDLER PILOTHOUSE

SET-23N

AIR CON FWD AIR CON PORT AIR CON STBD BERTH LIGHTS DIVERS CABIN LIGHTS MAIN **COOLING PUMP 1** FEU DE HUNE COOLING PUMP 2 DISCHARGE FEU DE PONT DISCHARGE DISCHARGE DISCHARGE GPS EMERGENCY LIGHTS **GALLERY FRIDGE GUINDEAU** HELM LIGHTS MACERATOR MASTER CABIN LIGHTS PORT ENGINE CONTROLS PRISE 12V PORT ENGINE CONTROLS PORT ENGINE CONTROLS QUARTZ LIGHTS STBD ENGINE CONTROLS SONDEUR STBD ENGINE CONTROLS STEREO STRD ENGINE CONTROLS STEREO MEMORY **TIMONERIE** STORAGE BIN PUMP **VENTILATEUR DE CALE** WATERBLASTER VHF

CABINE AVANT

SET-FRENCH

WINDSHIELD

CABINE AVANT CARINE BARORD CABINE TRIBORD DESSALINISATEUR ECL INTERIEUR **ESSUIE-GLACE** FEU DE MOUILLAGE FEUX DE NAVIGATION FLAPS TRIM TABS GROUPE D'EAU INSTRUMENTS PILOTE AUTOMATIQUE POMPE DE CALE REFRIGERATEUR SALLE DE BAIN SALLE MACHINE TABLE A CARTE

AUXILIARE 1

SET-FRENCH 2

AUXILIAIRE 1 AUXILIAIRE 2 AVERTISSEUR CABIN 2 CARIN 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

Labels-Sprayproof / Battery Management Panels

ANCHOR LIGHT

SET-1SP ANCHOR LIGHT < ANC. LIGHT NAV. LIGHT > ACCESSORIES **AERATOR** AUTOPILOT BAIT TANK PUMP BILGE PUMP BILGE PUMP <AUTO MAN> **BLOWER** CABIN LIGHTS COCKPIT LIGHTS DC OUTLETS DECK WASH **DEPTH SOUNDER** FLOOD LIGHTS FRESHWATER PUMP **FRIDGE** GPS HORN INST. LIGHTS

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

CSP6

ACCESSORIES

SET-1SP/F

SONDEUR

VENTILATEUR

SPOTS

WINCH

<MOUILLAGE NAVIGATION> 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

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 NAVIGATION LIGHTS RADAR SPARE SPOT LIGHTS STEREO STERN LIGHT TRIM TABS

VHF

WIPER

CMP-6WP

FRESHWATER

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 NAVIGATION LIGHTS RADAR SPARE SPOT LIGHTS STEREO STERN LIGHT TRIM TABS VHF WIPER

800-MS1-4

INSTRUMENTS

SPOTLIGHTS

TRIM TABS

WINCH

WIPER

RADIO

NAVIGATION LIGHTS

SALT WATER PUMP

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

CONTROLS

ACCESSORIES

800-MS1-4

24V HOUSE VOLTMETER FEED

SET-MSP4

TRI LIGHT

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 EWD BILGE PLIMP 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

Interior Series Switch Plates

SET-INT









SFT-IN2

















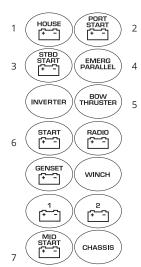


NOTE:

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

Labels-Battery Switches, Control Center & Contour Connect

Battery Switches 701-720



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-BT6 713-SB7 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 Switches 770 SET-770



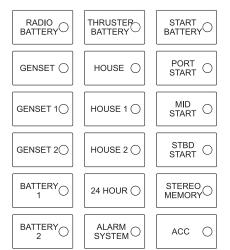
Circuit Breaker Modules

SET-CC-1

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

BATTERY CHARGER	BILGE PUMP STBD	ELECTRONICS
BILGE PUMP AFT	CATHODIC PROTECTION	ENGINE CONTROLS
BILGE PUMP ENGINE ROOM	CO DETECTOR	ENGINE CONTROLS PORT
BILGE PUMP FWD	DAVIT	ENGINE CONTROLS STBD
BILGE PUMP MID	DC MAIN	ENGINE ROOM LIGHTS
BILGE PUMP PORT	DC OUTLETS	FIRE SYSTEM
FRESH WATER PUMP	LECTRASAN	STEREO
FRIDGE	LIGHTS	STEREO MEMORY
FUEL TRANSFER PUMP	PORT BATTERY CHARGER	SUMP PUMP
HIGH WATER	SPARE	TOILET
HOLDING TANK	SPARE	TRIM TABS
HOUSE BATTERY CHARGER	STBD BATTERY CHARGER	WINCH

Battery Control Center SET-CC-BCC-1



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.



POWER DISTRIBUTION PANELS

Labels-Generation 2, Micro & Interior Panels

Spray-Proof Panels Generation II

Label Set SET-G2-1



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



INSTRUMENTS NAV LIGHTS RADIO SW PUMP SPOT LIGHTS UP PORT DN UP STBD DN WIPER

Label Set SET-G2-2



B/PUMP STBD B/PUMP FWD B/PUMP MID B/PLIMP 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

GPS

HORN

INST. LIGHTS



Contour Interior Series Monitor Panels

SET-1000



LBL-MICSYM



SET-1002



LBL-MIC2



METERS

AC & DC Systems Monitors





These state of the art full color monitors are made to meet the systems monitoring requirements of today's modern vessel and recreational vehicle. The DCSM and ACSM displays feature clear, extra large type face allowing for more detailed on-screen information and increased clarity. The screen has backlighting for easy night time viewing.

Tank Senders



A range of options for tank sender units plus interfaces for signal conversion for gauges and digital monitoring systems.



METERS

Gas Detectors



The BEP 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.

Solenoid Valves



Remote control of the gas connection ensures safety while adding user convenience.

Analog & Digital Meters



Comprehensive range of meters offers monitoring solutions for batteries, AC, tanks, and systems in operation.



Boston Whaler uses CZone® digital control and monitoring and a full complement of BEP products as standard equipment aboard the Outrage 420.



AC & DC Systems Monitors

These 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.

DC Systems Monitor (DCSM)

Specifications:

- 2.8" color QVGA LCD
- Input voltage 8-32V DC
- Dimensions (WxH): 90 x 100 mm
- · Backlit keypad

Monitors:

- · Charge/discharge amps for two banks
- Capacity remaining in A/h and %
- Battery condition
- · Tank fluid level
- · Circuit status

Features:

- · Eight 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

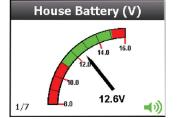


Part #	Description
80-600-0021-00	DCSM including 1x shunt and cable
80-600-0022-00	DCSM excluding shunt
600-DCSM-KIT	Panel Conversion Kit for DCM to DCSM

House Battery (Ah) 12.6V +23.0A 215AH (a))

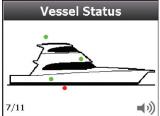
DC Power Meter

- Displays voltages of multiple battery banks (0–32V DC)
- Displays charge and discharge (amps) of two battery banks
- Displays battery capacity in amp hours
- · High/Low level alarms



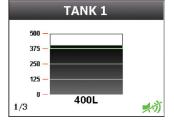
Display Type

 Configure the DCSM to show the data in analog, digital and graphic form



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
- · Resetable when leaving boat



Installation Cable Kit

 Two core screened cable in two lengths pre-terminated

Part # 600-DCM-5M 16.45" (5 m)
Part # 600-DCM-10M 32.9" (10 m)



Ammeter Shunt Enclosure

Provides a protective housing for shunt termination meeting ABYC standards.

- Digital large: 450A 50mV
- Analog small: 50A 50mV, 100A 50mV, 150A - 50mV
- Takes two small or one large shunt

Part # 711L



Ammeter Shunt

DC Current Ammeter Shunt measures DC amperage up to 450A using a scale of 0–50mV.

Part # LB-450-50

AC Systems Monitor (ACSM)

Specifications:

- 2.8" Color QVGA LCD
- Input voltage 8-32V DC
- Dimensions (WxH): 90 x 100 mm
- · Backlit keypad

Monitors:

· AC volts, amps and frequency

Features:

- Three user configurable inputs
- · Displays data in analog, digital and graphic forms
- · Output for load shedding
- Programmable high/low audio/visual alarms for each input



Part #	Description
80-600-0023-00	ACSM including 1x AC-VSEN-4 and 2x CT-10-3
600-ACSM-KIT	Panel Conversion Kit for ACM to ACSM

Ship's Power

232V 50Hz

8.5A

2.0kW

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)

Ship's Power (Vac)

232V 50Hz

/7 **◄**∋))

AC Volts/Frequency

 Displays AC voltage and frequency, 80-264V AC 50 & 60Hz

Ship's Power (Aac)

8.5A Loadshed Off

AC Amps

4/7

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 three voltage transformers for up to three voltage inputs.
- Dimensions:
 2.75" x 5.5" x 2"
 (69 x 140 x 50 mm)

Part # AC-VSEN-4



Current Transformer

- Maximum current 120A 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" x 1.55" x .55" (37.5 x 39.2 x 13.7 mm)
- Hole size: 0.5" (12 mm)
 Supplied with 80-600-0023-00

Part # 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)

Part # CT-HD



Surge Protection Module

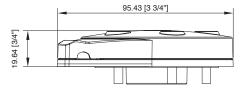
Protect your electronics from becoming damaged by harmful high voltage spikes. When fitted to the battery supply these modules look for sudden increases in voltage then switch into protection mode to absorb and suppress the high energy spike.

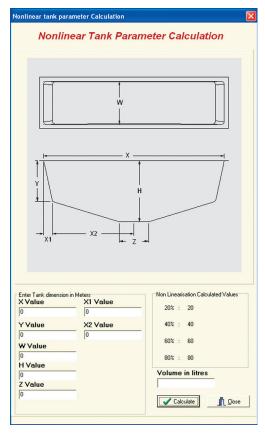
Part # 80-707-0004-00 12V DC
Part # 80-707-0005-00 24V DC



Ultrasonic Tank Sender—No Moving Parts

- Handles common outputs 240-33, 10-180, Vetus 10-300 for analog resistive gauges (not suitable for resistive digital gauges or CAN systems) 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 84) 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
- Environmental temperature: 39.2–149°F (4–65°C)
- · Chemical resistance: Petrol, diesel, water, toilet chemicals





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 Programing Device
Part # TS1-PK



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 for either the DCSM, or ACSM systems monitors.
- Switchable link for VDO or Teleflex signal. 10–32V supply.
- One unit per sender required.
- Dimensions: 2.4" x 1.3" x .9" (60 x 34 x 22 mm)

Part # 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 four 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.

Part # 600-TG



Tank Sender for 600-TG

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.

Part # RV-TS-5M



Tank Sender for 600-TG

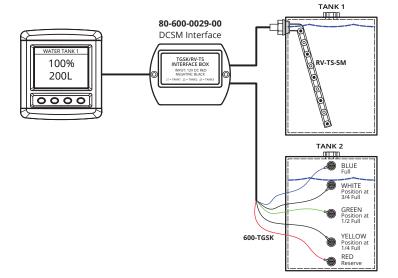
- Well nut hole size 3/8" (9 mm)
- · Cable length 5 m
- · One kit supplied with 600-TG

Part # 600-TGSK

Tank Sender Interface Module

Converts signals from up to three tanks fitted with either RV-TS-5M or 600-TGSK tank sender units, to 0-5V signal to suit ACSM and DCSM systems monitors.

Part # 80-600-0029-00





Gas Detectors

The BEP 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" x 3.5" x 0.7" (67 x 88 x 17 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, Part # 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

Current draw: 800mA

Current draw: 200mA when fitted with 600-GDL

Regulator flow rate: 3kPa Gas outlet: 3/8 BSP Gas inlet: QCC thermal nut

Outlet position: 90 degrees

Note: The VR3-12V 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.

Part # VR3-12V 12V



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.

Part # SA296COMP-12V 12V Part # SA296COMP-24V 24V







Analog & Digital Meters

- 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 three different battery banks
- Available 12V (8-16V) or 24V (16-32V)

Part #	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

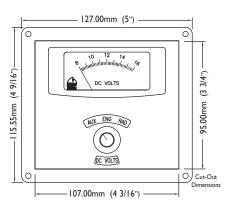


80-601-0025-00

Panel Mounted Analog Ammeter Panel

- Panel switchable for use on up to three different ammeter shunts
- Supplied with one shunt, meter scales available, 0–50A 0–100A 0–150A

Part #	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 84 for DCSM functionality
- Supplied with 450A-50mV shunt

Part # 80-600-0027-00



Panel Mounted AC Systems Monitor

- See page 85 for ACSM functionality
- Supplied with voltage and current transducers

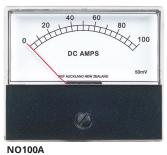
Part # 80-600-0028-00

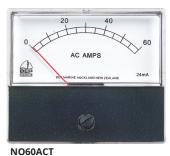
Analog Meters

- Analog meters as used in BEP Contour circuit breaker panels.
- All analog meters accurate to within 2.5%









N816DCV

NO300ACV

Meters	Part #	Range	Division Marks	Shunt Type
	N010A	0-10A DC	0.5A	Internal
	N020A	0-20A DC	1A	Internal
Amp (DC)	N050A	0-50A DC	2A	50A-50mV
	N0100A	0-100A DC	5A	100A-50mV
	N0150A	0-150A	1A	150A-50mV



When ordering optional external shunt ammeters, shunts must be ordered separately.

Meters	Part #	Range	Division Marks
Valt (DC)	N816DCV	8-16V DC	0.2V
Volt (DC)	N1632DCV	16-32V DC	0.4V
\/ol+ (AC)	N0150ACV	0-150V AC	10V
Volt (AC)	N0300ACV	0-300V AC	20V
Amn (AC)	N060ACT	0-60A AC	5A
Amp (AC)	N0100ACT	0-100A AC	5A



CT-10-AN must be ordered when using N060ACT or N0100ACT.

71.00mm (2 13/16") ————————————————————————————————————	
10 12 14 8 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	1/4")
 48.30mm (1 7/8")- 	32.20mr

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

Part #	in LxWx1.6	mm LxWx40	Label Set #	LEDs	Alarm	Mute switch
SOP1	4.5" x 5"	115 x 127	1	4	No	No
SOP1-AL	4.5" x 5"	115 x 127	1	3+1 switch	Yes	Yes
SOP2	4.5" x 9"	115 x 239	1-2	8	No	No
SOP2-AL	4.5" x 9"	115 x 239	1-2	7+1 switch	Yes	Yes





SOP2

Wire & Cable Technical Data

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

		Curre	nt (Am	ps)										
Leng	th	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	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

		Curre	nt (Am	ps)										
Leng	th	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

		Curre	nt (Am	ps)										
Leng	th	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

Wire & Cable Technical Data

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

		Curre	nt (Am	ps)										
Leng	th	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

		Curre	nt (Am	ps)							Ū			
Leng	th	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

		Curre	nt (Am	ps)										
Leng	th	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

Wire & Cable Technical Data

Conductor Sizes

AWG	mm²	AWG CM area	SAE CM area	Ampacity E Outside	ngine Space 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



PN	Page	PN	Page	PN	Page	PN	Page	PN	Page
1000-6W	63	1001607	55	1001907	52	1101-BK-TS	63	185100F-01-1	45
1000-6W-24V	63	1001608	55	1001908	52	121-710-1101/1	47	185100F/DSP	45
1000-ACSM	63	1001609	55	1002001	52	124001000	46	185100P-01-1	45
1000-AM10	63	1001610	55	1002002	52	12VDUSB	62	185100P/DSP	45
1000-AM20	63	1001701	49	1002003	53	12VDUSB-B	62	185120F-01-1	45
1000-AM50	63	1001702	49	1002004	52	12VDUSBN-B	62	185120F/DSP	45
1000-DCSM	63	1001703	49	1002005	53	12VDUSBW-B	62	185120P-01-1	45
1000-VM-12V	63	1001704	50	1002006	52	12VPG	62	185120P/DSP	45
1000-VM-24V	63	1001705	50	1002007	53	12VRC	62	185135F-01-1	45
1001001	56	1001706	50	1002008	53	184050P-01-1	45	185135F/DSP	45
1001002	56	1001707	50	1002009	53	184060P-01-1	45	185135P-01-1	45
1001101	57	1001708	50	1002010	52	184080P-01-1	45	185135P/DSP	45
1001102	57	1001709	50	1002011	53	184100F-01-1	45	185150F-01-1	45
1001103	57	1001710	50	1002012	53	184100P-01-1	45	185150F/DSP	45
1001104	57	1001711	50	1002013	52	184150F-01-1	45	185150P-01-1	45
1001301	54	1001712	50	1002014	53	184150P-01-1	45	185150P/DSP	45
1001302	54	1001713	50	1002015	52	185030F-01-1	45	600-ACSM-KIT	85
1001303	54	1001714	50	1002016	53	185030F/DSP	45	600-DCM-10M	84
1001304	54	1001715	50	1002017	53	185030P-01-1	45	600-DCM-5M	84
1001305	54	1001716	50	1002018	53	185030P/DSP	45	600-DCSM-KIT	84
1001306	54	1001717	49	1002019	53	185040F-01-1	45	600-GD	88
1001307	54	1001718	49	1002020	53	185040F/DSP	45	600-GDL	88
1001308	54	1001801	49	1002021	52	185040P-01-1	45	600-GDRV	88
1001401	51	1001802	49	1002022	52	185040P/DSP	45	600-LPG	88
1001402	51	1001803	49	1002023	52	185050F-01-1	45	600-TG	87
1001501	51	1001804	49	1002024	52	185050F/DSP	45	600-TGSK	87
1001502	51	1001805	49	1002025	52	185050P-01-1	45	600-TLM-SIF	87
1001503	51	1001806	49	1002027	52	185050P/DSP	45	700	12
1001504	51	1001807	49	1002101	56	185060F-01-1	45	700B	12
1001505	51	1001808	49	1002102	56	185060F/DSP	45	701	12
1001506	51	1001809	49	1002201	57	185060P-01-1	45	701-KEY	13
1001507	51	1001810	49	1002202	57	185060P/DSP	45	701-KEY-EP	13
1001508	51	1001811	49	1002203	57	185070F-01-1	45	701-MD	14
1001509	51	1001812	49	1002204	57	185070F/DSP	45	701-MD-D	14
1001601	56	1001901	52	1002205	57	185070P-01-1	45	701-MDVS	16
1001602	56	1001902	52	1002206	57	185070P/DSP	45	701-MDVS-24V	16
1001603	55	1001903	52	1002207	57	185080F-01-1	45	701-PM	13
1001604	55	1001904	52	1002301	56	185080F/DSP	45	701B	12
1001605	55	1001905	53	1100-BK	63	185080P-01-1	45	701B-PM	13
1001606	55	1001906	52	1101-BK	63	185080P/DSP	45	701S	12

PN	Page	PN	Page	PN	Page	PN	Page	PN
701S-B	12	713-HB	80	771-SFD-B	10	779-LBZ-1-B	34	80-700-0051-
701S-B-PM	13	713-MS	80	772-DBC	10	779-LBZ-2-B	34	80-700-0052-
701S-PM	13	713-PS	80	772-DBC-B	10	80-511-0001-00	64	80-701-0018-
702-2S/B	38	713-SB	80	772-DBC-EZ	10	80-511-0001-01	64	80-707-0004-0
702-2S/B	38	713-SS	80	772-DBC-EZ	11	80-511-0002-00	64	80-707-0005-0
702-2SB/L	38	714-140A-DVSR	18	772-DBC-EZ-B	10	80-511-0002-01	64	80-708-0013-0
702-8-10-B	38	714-140A-DVSR-B	18	777-BB3S-650	30	80-511-0003-00	64	80-708-0017-0
702-MFH	43	715-H	18	777-BB3S-650-B	30	80-511-0003-01	64	80-712-0039-0
702-MFH-B	43	715-S	19	777-BB4S-500	30	80-511-0004-00	64	80-712-0039-0
702B	38	715-V	18	777-BB4S-500-B	30	80-511-0004-01	64	80-716-0014-0
702SB	38	716-H-140A-DVSR	19	777-BB5S-650	30	80-511-0005-00	64	80-716-0015-0
704-4S/B	38	716-SQ-140A-DVSR	19	777-BB5S-650-B	30	80-511-0005-01	64	80-716-0016-0
705-100A	39	716-V-140A-DVSR	19	777-BB8S-650	30	80-511-0006-00	64	80-716-0017-0
705-100A/B	39	717-140A-DVSR	20	777-BB8S-650-B	30	80-511-0006-01	64	80-716-0018-0
705-135A	39	718-140A-DVSR	19	777-Z10W-200	30	80-511-0007-00	64	80-724-0006-0
705-135A/B	39	719-140A-DVSR	20	777-Z10W-200-B	30	80-511-0007-01	64	80-724-0007-0
705-150A	39	720	12	777-Z18W-200	30	80-511-0008-00	64	80-911-0045-0
705-150A/B	39	720-MDO	14	777-Z18W-200-B	30	80-511-0008-01	64	800-MS1
705-50A	39	720-MDO-EP	16	778-ANL	31	80-511-0009-00	64	800-MS2
705-50A/B	39	720-MDVSO	16	778-ANL-B	31	80-511-0009-01	64	800-MS3
705-80A	39	720B	12	778-ANL2S	31	80-511-0010-00	64	800-MS4
705-80A/B	39	721	12	778-ANL2S-B	31	80-511-0010-01	64	900-2WP
706-2W	39	721B	12	778-ANLTP	31	80-511-0011-01	64	900-2WPMOM
706-2W/B	39	770	10	778-ANLTP-B	31	80-511-0012-01	64	900-2WPOFO
706-4W/B	39	770-B	10	778-T2S-400	31	80-511-0031-00	64	900-3WPS
706-4WB	39	770-DP	10	778-T2S-400-B	31	80-511-0031-01	64	900-3WPSW
707	39	770-DP-B	10	778-T2S-600	31	80-600-0021-00	84	900-4WP
708-107-V3	24	770-DP-EZ	10	778-T2S-600-B	31	80-600-0022-00	84	900-4WPW
708-42.5	38	770-DP-EZ-B	10	779-LB-1-B	34	80-600-0023-00	85	900-5WPS
708-54.5	38	770-EZ	10	779-LB-2-B	34	80-600-0027-00	90	900-5WPSW
708-62.0	38	770-EZ-B	10	779-LBJ-2	34	80-600-0028-00	90	900-5WPUSB
708-64.5	38	770-KEY-EP	11	779-LBJ-2-B	34	80-600-0029-00	87	900-6WP
708-68.5	38	77049020	42	779-LBJ-3	34	80-601-0020-00	90	900-6WPW
708-70.0	24	77049160	42	779-LBJ-3-B	34	80-601-0021-00	90	900-AC1
710-140A	17	77049400	42	779-LBJ-4	34	80-601-0022-00	90	900-AC1-110V
710-140A-B	17	771-S	10	779-LBJ-4-B	34	80-601-0023-00	90	900-AC2H-ACS
711L	84	771-S-B	10	779-LBJ-5	34	80-601-0024-00	90	900-AC2H-ACS
713	25	771-S-EZ	10	779-LBJ-5-B	34	80-601-0025-00	90	900-AC2H-AM
713-BT	80	771-S-EZ-B	10	779-LBJ-6	34	80-601-0026-00	90	900-AC2H-AM
713-EP	80	771-SFD	10	779-LBJ-6-B	34	80-700-0050-00	22	900-AC2V-ACS

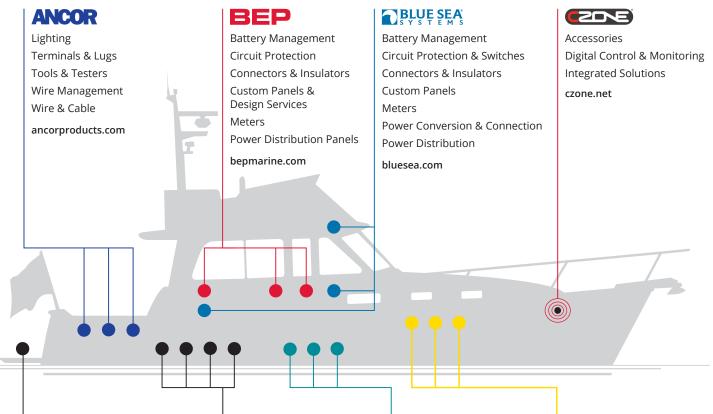
PN	Page	PN	Page	PN	Page	PN	Page	PN	Page
900-AC2V-ACSM-110	75	903-DCSM	70	BC-PM2	76	CBS-40A-SP	47	CLB-40	46
900-AC2V-AM	75	904-AM	70	BFHD-30A	42	CBS-50A-DP	47	CLB-40/DSP	46
900-AC2V-AM-110	75	904-DCSM	70	BFHD-30A/DSP	42	CBS-50A-DP-TC230	47	CLB-BOOT	46
900-AC3-ACSM	75	904NM	68	BFHD-40A	42	CBS-50A-SP-IG	47	CSP6	62
900-AC3-AM	75	904NM-DP	72	BFHD-40A/DSP	42	CBS-50A-TP / 50	47	CSP6-F	62
900-AC3-AM-110	75	904NMH	68	BFHD-50A	42	CBS-5A-SP	47	CSP6-FW	62
900-AC3-ASCM-110	75	904NMV	69	BFHD-50A/DSP	42	CC-1	24	CSP6-PTC	62
900-AC4-ACSM	75	905-AM	70	BFHD-60A	42	CC-5	24	CSP6-PTCW	62
900-AC4-ACSM-110	75	905-DCSM	70	BFHD-60A/DSP	42	CC-801	23	CSP6W	62
900-ACCH	74	905NM	69	BFHD-70A	42	CC-802	23	CT-10-3	85
900-ACCH-110V	74	905NMV	69	BFHD-70A/DSP	42	CC-803N	23	CT-HD	85
900-ACM2-AM	74	905V-AM	70	BFHD-80A	42	CC-804	24	FANL-600-B	42
900-ACM2-AM-110	74	905V-DCSM	70	BFHD-80A/DSP	42	CC-810	23	FANL-675-B	42
900-ACM2W	74	906-AM	71	BL-SL-L	88	CC-BLANK	24	FANL-750-B	42
900-ACM2W-110V	74	906-DCSM	71	BSP-1	13	CC-HDBM	24	FD-2	88
900-ACM6V-AM	74	906NMH	69	CBL-100A-DP	47	CG2-2W	60	FT-225-B	42
900-ACM6V-AM-110	74	906NMV	69	CBL-100A-SP	25	CG2-2W-F	60	FT-250-B	42
900-ACM6W	74	906V-AM	71	CBL-100A-SP	47	CG2-2W-F-W	60	FT-300-B	42
900-ACM6W-110V	74	906V-DCSM	71	CBL-50A-DP	47	CG2-2W-W	60	FT-350-B	42
900-AM	70	907-AM	71	CBL-50A-SP	25	CG2-4W	60	FT-400-B	42
900-BA	61	AC-VSEN-4	85	CBL-50A-SP	47	CG2-4W-F	60	FT-450-B	42
900-DC	68	ATC-6W	43	CBL-60A-DP	47	CG2-4W-F-W	60	FT-500-B	42
900-RCD-16A	46	ATC-6W/B	43	CBL-60A-SP	47	CG2-4W-W	60	FT-600-B	42
900-RCD-1X16-32A	46	ATC-6WQC	43	CBL-75A-DP	47	CG2-6W	60	HDBFH	43
900-RCD-2X16A	46	BB-12W-2NC	37	CBL-75A-SP	25	CG2-6W-F	60	HDBFH/DSP	43
900-RCD-2X32A	46	BB-12W-2NC/DSP	37	CBL-75A-SP	47	CG2-6W-F-W	60	IP100	42
900-RCD-32A	46	BB-12W-2S	37	CBS-10A-DP	47	CG2-6W-W	60	IP100P/DSP	42
900-SOP	61	BB-12W-2S/DSP	37	CBS-10A-SP	47	CG2-JB	60	IP125	42
900V-DCSM	70	BB-24W-2S	37	CBS-15A-DP	47	CLB-05	46	IP150	42
901H	68	BB-24W-2S/DSP	37	CBS-15A-DP-TC230	47	CLB-05/DSP	46	IP150P/DSP	42
901V	68	BB-4S-150	37	CBS-15A-SP	47	CLB-10	46	IP175	42
901V-AM	70	BB-4S-150A/DSP	37	CBS-20A-DP	47	CLB-10/DSP	46	IP200	42
901V-DCSM	70	BB-6W-2S	37	CBS-20A-DP-TC230	47	CLB-15	46	IP200P/DSP	42
902-AM	70	BB-6W-2S/DSP	37	CBS-20A-SP	47	CLB-15/DSP	46	IP250	42
902-DCSM	70	BB-LINK17MM	43	CBS-25A-DP	47	CLB-20	46	IP250P/DSP	42
902NMH	68	BC-FM1	76	CBS-25A-SP	47	CLB-20/DSP	46	IP300	42
902NMV	68	BC-FM2	76	CBS-30A-DP	47	CLB-25	46	IP300P/DSP	42
902V-AM	70	BC-FM3	76	CBS-30A-DP-TC230	47	CLB-25/DSP	46	IP355	42
902V-DCSM	70	BC-FM4	76	CBS-30A-SP	47	CLB-30	46	IP355P/DSP	42
903-AM	70	BC-PM1	76	CBS-40A-DP	47	CLB-30/DSP	46	IP40	42

PN	Page	PN	Page	PN	Page
P425	42	IST-8MM-2S-B	32	MRBF-250A-B	44
P425P/DSP	42	J01A	42	MRBF-300A	44
P50	42	J02A	42	MRBF-300A-B	44
IP500	42	J03A	42	MRBF-50A	44
IP500P/DSP	42	J05A	42	MRBF-50A-B	44
IP50P/DSP	42	J10A	42	MRBF-80A	44
IP63	42	J15A	42	MRBF-80A-B	44
IP63P/DSP	42	J20A	42	MRCBF-200A	44
IP80	42	J25A	42	MRCBF-200A-B	44
IP80P/DSP	42	J30A	42	MRCBP-200A	44
IS-10MM-1	36	J40A	42	MRCBP-200A-B	44
IS-10MM-1R	36	J7.5A	42	N0100A	91
IS-10MM-2	36	JJ05A	42	N0100ACT	91
IS-10MM-2/L	36	JJ10A	42	N010A	91
IS-10MM-8MM	36	JJ15A	42	N0150A	91
IS-6MM-1	36	JJ20A	42	N0150ACV	91
IS-6MM-1/DSP	36	JJ30A	42	N020A	91
IS-6MM-1R	36	LB-450-50	84	N0300ACV	91
IS-6MM-1R/DSP	36	LBL-MIC1	81	N050A	91
IS-6MM-2	36	LBL-MIC2	81	N060ACT	91
IS-6MM-2/DSP	36	LBL-MICSYM	81	N1632DCV	91
IS-8MM-1	36	M28-DCSM	73	N816DCV	91
IS-8MM-2R	36	M32-DCSM	73	NC32Y-AM	72
ISC-10BK	36	M44-DCSM	73	NC32Y-DCSM	72
ISC-10R	36	M44H-DCSM	73	NC36L-AM	72
ISC-6-2	36	M56-DCSM	73	NC36L-DCSM	72
ISC-6-2R	36	MCB-3WENC	46	NC36NM	69
IST-10MM-1S	32	MCB16A	46	NO100A	91
IST-10MM-1S-B	32	MCB32A	46	NO300ACV	91
IST-10MM-1SPT	32	MCB63A	46	NO60ACT	91
IST-10MM-1SPT-B	32	MRBF	44	PMCC-10	46
IST-10MM-2S	32	MRBF-100A	44	RCD16A30MA	46
IST-10MM-2S-B	32	MRBF-100A-B	44	RCD32A30MA	46
IST-10MM-8MM	32	MRBF-125A	44	RCD63A	46
IST-10MM-8MM-B	32	MRBF-125A-B	44	RES-12WAY	69
IST-8MM-1S	32	MRBF-150A	44	RES-16WAY	69
IST-8MM-1S-B	32	MRBF-150A-B	44	RES-20WAY	69
IST-8MM-1SPT	32	MRBF-200A	44	RES-24WAY	69
IST-8MM-1SPT-B	32	MRBF-200A-B	44	RES-28WAY	69
IST-8MM-2S	32	MRBF-250A	44	RES-32WAY	69
13 I-OIVIIVI-Z3	JŁ	WINDI 9230A	77	INLU-JAVVAI	0,5



For decades Ancor, BEP, Blue Sea Systems, CZone, Lenco, Marinco, Mastervolt and ProMariner have worked independently to provide innovative electrical products. Now the eight companies are working together to offer comprehensive electrical solutions for marine and mobile applications.

Providing more than products. Providing Solutions.





Actuators & Accessories
Auto Glide Automatic Boat Leveling
Electric Hatch Lifts
Electric Trim Tabs
Rocker Switch Kits
Tactile Switch Kits

lencomarine.com

Trim Tab Retrofit Kits

ProMariner[™]

Inverter / Chargers
Inverters
Isolators
Vented Battery Chargers
Waterproof Battery Chargers
promariner.com

MASTERVOLT

Alternators & Regulators
Batteries
Battery Chargers
Digital Control & Monitoring
Inverter / Chargers
Inverters
Transformers
mastervolt.us

MARLINCO

Battery Management
DC Power Connections
Horns
Lighting
Power Conversion
Shore Power
Ventilation
Wiper Systems

marinco.com

