



Industrial Solutions

COMMERCIAL EQUIPMENT

NAVICOTM
GROUP



ANCOR

For over 40 years Ancor has been the industry leader for quality tinned copper Marine Grade® wire and cable. Ancor's comprehensive product line includes everything required to complete a wiring project. This includes Marine Grade wire and cable, terminals and connectors, wire management products, and hand tools. Ancor designs products to the highest standards that meet UL, ABYC, NMMA and USCG standards.



BEP

BEP offers a range of high quality electrical solutions designed for harsh environments. Every product meets exacting performance specifications and is designed to withstand extreme conditions.



BLUE SEA

Blue Sea Systems was founded in 1992 based on a commitment to create innovative, high quality electrical products to improve the safety, simplicity, and reliability. Products include battery chargers, battery switches, automatic charging relays, fuse blocks, busbars, meters, and both standard and custom power distribution panels.



GUEST

Guest has been designing battery products for over 45 years. Our battery chargers, maintainers, and battery switches are designed and built to stand up to today's punishing industrial environment. Materials are selected to provide toughness and durability over a long product lifespan. All battery chargers are 100% waterproof and shock resistant.



MARINCO

Since 1972, Marincor power inlets and cords have set the industry standard. They are built to withstand the harshest industrial and marine environments. Marincor has continued to expand their product line to offer a complete range of shore power cords as well as a broad range of cord adapters. Marincor also offers over 800 electrical products, including straight-blade and locking wiring devices for a wide range of industries, single pole CAMs for portable power, and stage pins for the entertainment power and lighting industry.



MASTERVOLT

Mastervolt has been a strong, innovation-driven company since its founding in 1991. Mastervolt stands for reliable autonomous power solutions. Mastervolt's electric solutions are widely used in demanding markets such as mobile, off shore, industrial, autonomous solar and infrastructure.



ProMariner®

ProMariner leverages the synergy in technology and ability to ruggedize on board charger and inverter products to meet the specific needs of the mobile, industrial, and commercial markets.



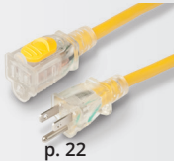
Progressive Industries

Progressive Industries has been delivering the finest RV surge and electrical protection since 1998. We offer portable units, hardwired units, and RV adapters and accessories. Progressive Industries is dedicated to develop products with the highest quality and reliability.

Table of Contents

WIRING DEVICES

The Marincio Difference	7
Wiring Devices TOC	8
Straight Blade Standard Devices	9
Straight Blade Clamp-Lock™	11
Straight Blade Hospital Grade	13
Straight Blade Corrosion Resistant	15
Straight Blade ConnectGlow	17
Straight Blade Dimensions & Specifications	19
IEC 320 Specification-Grade Connectors	21
Generator Cordsets	21
Extension Cords	22
Locking Standard Devices	23
Locking ConnectGlow	17
Locking Corrosion Resistant	29
Locking Isolated Ground	31
Locking Dimensions & Specs	33
Accessories	37
Adapters	39
Product Selection Guides	40



STAGE PIN DEVICES

Bates Inlines	59
Bates Panel Mounts	60
Group 5 Inlines	61
Group 5 Panel Mounts & Wire Charts	62
Stage Pin & Panel Mount Dimensions	63
Entertainment Adapters	65
20A Power Connectors	66



BATTERIES & BATTERY MANAGEMENT

ChargeMaster Plus Chargers	69
Mass Combi® Inverter/Chargers	73
Mastervolt® DC-DC Converters	77
Mass Sine Ultra and Mass Sine Inverters	81
CombiMaster® Inverter/Chargers	85
ChargePro™ Battery Chargers	89
Portable Battery Chargers	89
1.5A ChargePro Maintainer	90
ChargePro On Board Battery Charger	91
ProTechOne Battery Charger	93
Inlets & Charger Cords	96
Battery Switches	98



CAM TECH DEVICES

Inline Connectors	45
Panel Mounts	47
Cam Reducers	50
CL/CLS/CLM Adapters	51
CL/CLS/CLM Covers & Caps	52
Tools, Parts & Accessories	54
Dimension Drawings	55



DC DEVICES

USB Chargers	109
Plugs & Receptacles	111



CROSS REFERENCES & INDEX

Cross References	115
Part Number Index	120

WIRING DEVICES

Marinco wiring devices have been industry tested for over 30 years. When the environment required is dirty, dusty, hot, humid, or wet, our products will stand up to the test. Thick walled molded housings provide a rugged design. One piece solid brass current carrying parts reduce areas where riveted parts may fatigue and break or create excess heat.

Our broad product offering includes 15A and 20A straight blade and locking, and 30A and 50A locking configurations as well as hospital grade, corrosion resistant, illuminated, and isolated ground options.





The Marincos Difference		7
Wiring Devices TOC		8
Straight Blade Standard Devices		9
Straight Blade Clamp-Lock™		11
Straight Blade Hospital Grade		13
Straight Blade Corrosion Resistant		15
Straight Blade ConnectGlow		17
Straight Blade Dimensions & Specs		19
IEC 320 Specification-Grade Connectors		21
Generator Cordsets		21
15A Marine Grade & Heavy-duty Extension Cords		22
Locking Standard Devices		23
Locking ConnectGlow		27
Locking Corrosion Resistant		29
Locking Isolated Ground		31
Locking Dimensions & Specs		33
Accessories		37
Adapters		39
Product Selection Guides		40

Marinco wiring devices provide the highest
quality product at a fair price

The Marincos Difference

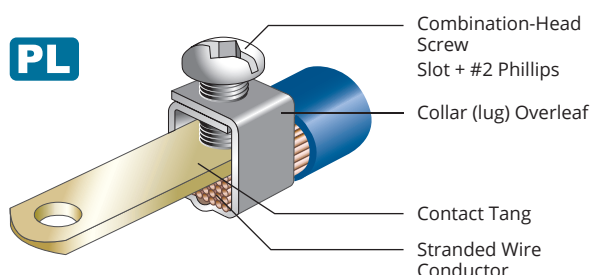
Marinco offers a full line of industry specific products with the Marinco tradition of innovative design and customer response. Products include 15A, 20A, 30A and 50A devices, both straight blade and locking.

Achieve the lowest applied cost with fast, sure assembly

Many features and benefits are universal to all Marinco brand products:

Exclusive Perma-Lock™ Terminal Tightening

As the screw goes down, the collar locks up: As the terminal screw tightens down on the contact tang, it compresses the wire underneath the tang, causing the screw to exert an upwards lift on the collar overleaf. This lifting action "locks up" the screw's threads. Heat cycling and vibration cannot loosen the screw, and stress relief is virtually eliminated.



Cord Grip

Powerful mechanical clamp is located inside the housing resulting in a neat, compact design. The clamp traps the cord against the rear of the housing for a superior cord grip, preventing strain on terminals. Internal cord clamp accommodates the widest range of cord sizes and shapes.



Terminals

The clear terminal cover allows visual inspection of the terminal area. Large terminals with solid brass clamps bundle the wires for a neat, secure connection. Terminals are clearly marked in accordance with the National Electrical Code. Color-coded markings add to wiring ease and safety. Wire entry holes are located close together to ease insertion of wires.



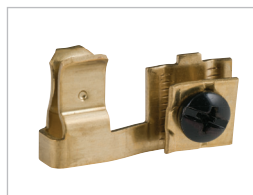
Receptacle Clamp Terminals

The clamp is barbed to hold the conductor in place and cut oxide build-up. The entire terminal is securely held in place by the body of the device.



Single-Piece Connector Contacts

A Marinco exclusive feature! Longer beam provides more contact pressure. One-piece design eliminates the rivet found on many NEMA locking devices.



One-Piece All-Brass Receptacle Contacts

Sturdy one-piece design eliminates the rivet found in conventional contacts. No rivet means less chance for resistance and heat rise.

Other standard Marinco features include:

- **Bevel housing**—prevents snagging nearby equipment
- **Dust seals**—for keeping foreign materials from terminals
- **Open position terminals screws**—Terminals screws are installed in open position to speed assembly
- **Speed style screws**—for faster assembly
- **Spacious housing**—for faster assembly, easy clamping to cable and convenient wire stripping

OEM Packaging Option

Devices are available bulk packed with assembly screws backed out and without individual packaging.

Add suffix ".OEM" to the part number.

Customization

We would be glad to discuss any product customization, custom color, custom logos, printing or engraving. Contact your sales representative for more information.

Selection

Blanks were left in the selection guides to notate our ability to provide these configurations if you need one of these unlisted products. Please call customer service or contact your sales rep for more information.

Straight Blade Devices

15A & 20A
(pgs 10-20)



- 9 Standard**
Connectors
Plugs
Receptacles
Flanged Inlets
Flanged Outlets
- 11 Clamp-Lock™**
Connectors
Plugs
- 13 Hospital Grade**
Connectors
Plugs
- 15 Corrosion Resistant**
Connectors
Plugs
Receptacles
- 17 ConnectGlow**
Connectors
Plugs
- 21 IEC 320 Specification-Grade Connectors**
Connectors

Locking Devices

15A, 20A, 30A & 50A
(pgs 24-37)



- 23 Standard**
Connectors
Plugs
Receptacles
Flanged Inlets
Flanged Outlets



- 27 ConnectGlow**
Connectors
Plugs



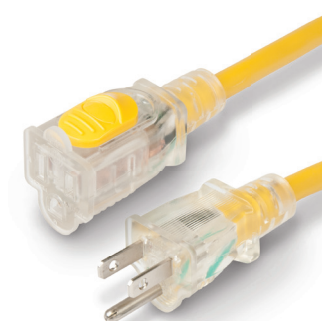
- 29 Corrosion Resistant**
Connectors
Plugs
Receptacles



- 31 Isolated Ground**
Receptacles



- 21 Generator Cordsets**



- 22 15A Extension Cords**

Straight Blade Standard Devices (15A & 20A)

Count on Marincó for industrial-grade straight blade 15A and 20A wiring devices. Heavy duty material is used for all housings to hold up to regular abuse on cordsets and equipment alike. All models are designed with the installer in mind to minimize labor and ensure ease of assembly.



Exclusive Perma-Lock™ wire terminals

provide secure, easy to wire connections (15A models). Details on page 7.



Applications

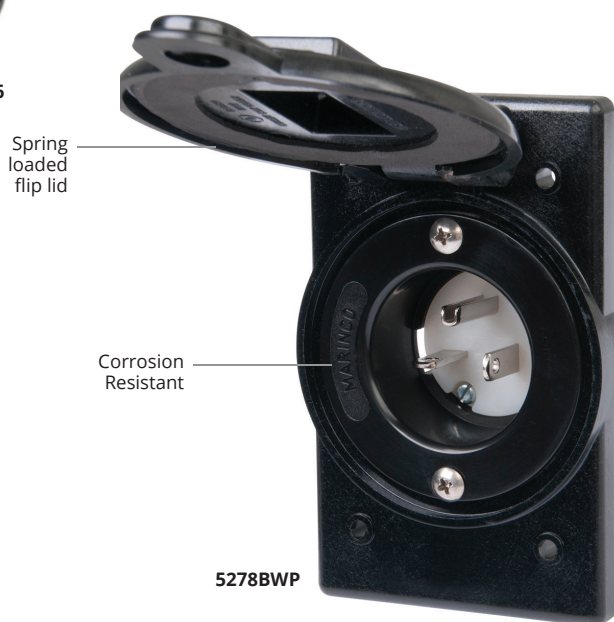
- Power-driven hand tools
- Electrical industrial equipment
- Manufacturing plants
- Broadcast studio equipment
- Staging & entertainment equipment
- Fire-protection equipment
- Hospital/healthcare equipment
- Temporary taps at construction sites

Plugs & Connectors

- Adjustable cord clamp provides superior strain relief
- Close-in wire entrance holes and generous wiring space make it easy to wire
- Terminals are open, ready to wire for quickest assembly
- Cord clamp insert allows use of greatest range of cord sizes
- Dust seal keeps contaminants out of wiring chamber

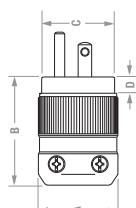
Receptacles

- Optional back or side wiring for on-the-job versatility and easy installation
- Captive self-grounding clip eliminates the need for a bonding jumper [NEC Section 250-146(B)]
- Triple-wipe copper alloy power contacts assure long-life contact pressure



Flanged Inlets & Outlets

- Flanged housing allows mounting in a panel without access from the rear



Dimensional drawings and specifications on pages 19-20

5278

All-nylon construction for durability

Cover provides additional protection against dust and dirt

5278DRI

Straight Blade Standard Selection



Amps	Poles/Wires	Voltage	NEMA Config.	Body Color	Housing Color	Connector	Plug	Duplex Receptacle	Flanged Inlet	Flanged Outlet	Dust Resistant Inlet	Dust Resistant Outlet	Spring Loaded Flip Lid Inlet
15	2P 3W	125	5-15R 5-15P	white	black	5269	5266	5252	5278	5279	5278DRI	5279DRO	5278BWP
15	2P 3W	125	5-15R 5-15P	black	black	5269BL	5266BL	—	5278BL	5279BL	150BBI	—	—
15	2P 3W	250	6-15R 6-15P	white	black	5669	5666	—	5678	5679	5678DRI	—	—
20	2P 3W	125	5-20R 5-20P	white	black	5369	5366	5352	5378	5379	—	5379DRO	—
20	2P 3W	125	5-20R 5-20P	black	black	—	—	—	—	—	200BBI.RV	—	5378BWP
20	2P 3W	250	6-20R 6-20P	white	black	5469	5466	5462	5478	5479	—	—	—

Right Angle Devices

Amps	Poles/Wires	Voltage	NEMA Config.	Plug
15	2P 3W	125	5-15P	5266RA



Right-Angle Adapter with Cord Grip

- Accommodates .456" to 1.150" cords
- Available in black
- Fits 15 and 20 amp straight blade devices
- Compatible with plugs 5266, 5666, 5366 and 5466



Part # 15RA

Related Products



Accessories
page 37-39

OEM Available: Add suffix ".OEM" to the Part number for bulk packaging. Quantities vary. See your sales rep for quantity details.

Straight Blade Clamp-Lock™ Devices (15A & 20A)

The patented Clamp-Lock termination system provides a maintenance-free connection. This revolutionary system actually gets stronger as the cable is pulled, which provides peace of mind knowing this durable trouble-free solution can handle heat, shock and vibration. Most important, Clamp-Lock enables wiring termination up to 50% faster than conventional screw termination products resulting in a more cost-effective process.



Applications

- Power-driven hand tools
- Electrical industrial equipment
- Manufacturing plants
- Broadcast studio equipment
- Staging & entertainment equipment
- Fire-protection equipment
- Hospital/healthcare equipment
- Temporary taps at construction sites



Features & Benefits

Plugs & Connectors

- Adjustable cord clamp provides superior strain relief
- Close-in wire entrance holes and generous wiring space make it easy to wire
- Two assembly screws make for fast assembly
- Terminals are open, ready to wire for quickest assembly
- Cord clamp insert allows use of greatest range of cord sizes
- Beveled housing so device won't get caught on stairs, equipment, etc
- Dust seal keeps contaminants out of wiring chamber

Removable inserts for various cable diameters

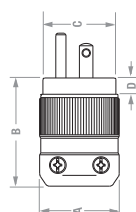
For proper assembly with larger gauge cables, Clamp-Lock is furnished with removable cable clamp inserts.



Straight Blade Clamp-Lock™ Selection



Amps	Poles/ Wires	Voltage	NEMA Config.	Body Color	Housing Color	Connector	Plug
15	2P 3W	125		white	black	CL5269	CL5266
15	2P 3W	125		black	black	CL5269BL	CL5266BL
15	2P 3W	250		white	black	CL5669	CL5666
20	2P 3W	125		white	black	CL5369	CL5366
Hospital Grade Clamp-Lock™							
15	2P 3W	125		white	black	CL8219	CL8215
15	2P 3W	125		white	transp	CL8219T	CL8215T



Dimensional drawings
and specifications
on pages 19-20



How Does it Work?

Simply open the color-coded green, white and black cam levers, insert the wires and then close the cam levers—**no tools are needed**. The cage clamp grips the wire with redundant normal force and doesn't let go. Slide the housing over the connection and lock it positively in place with two captive screws.

Related Products



Accessories
page 37-39



CL5266



CL5269



CL8215



CL8219T
Hospital Grade

OEM Available: Add suffix ".OEM" to the Part number for bulk packaging. Quantities vary. See your sales rep for quantity details.

Straight Blade Hospital Grade Devices (15A)

These “green dot” devices have been rigorously tested for grounding reliability, assembly integrity, strength and durability.

Includes 15A and 20A straight blade connectors and plugs.

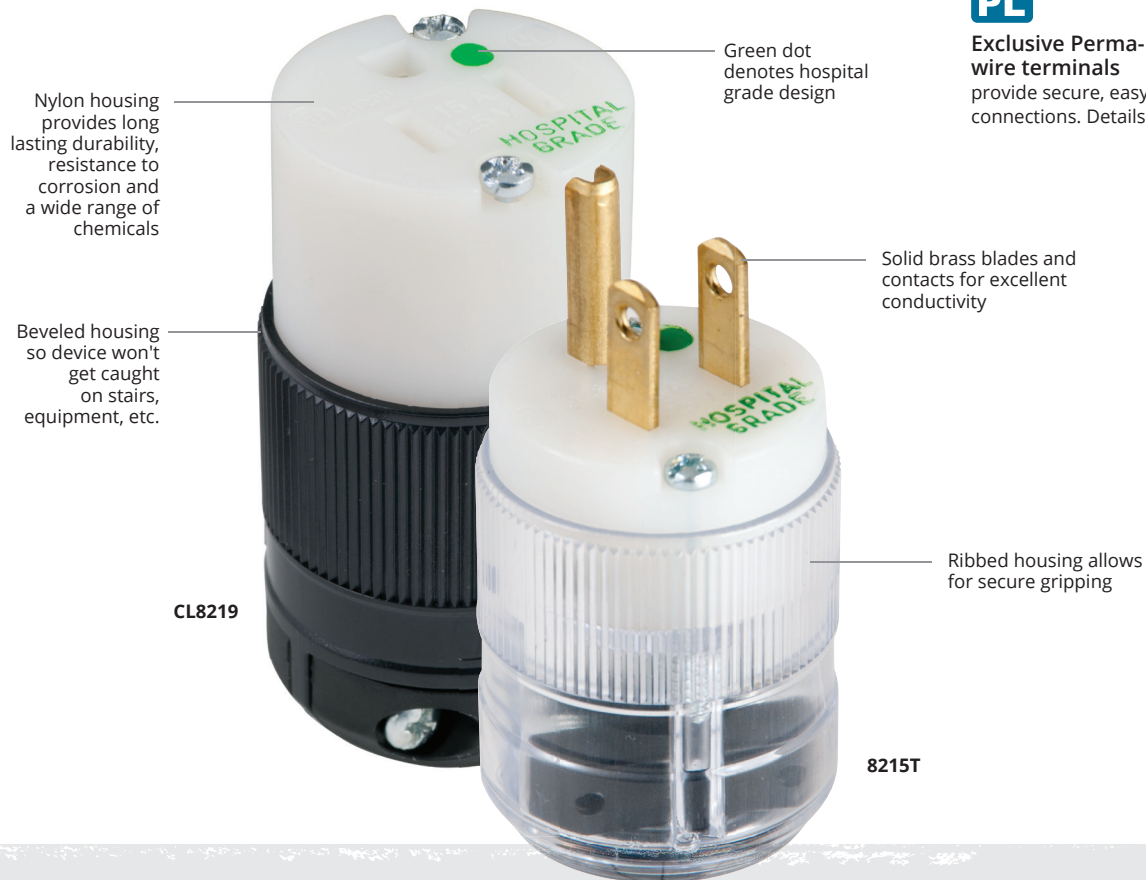
Available in clear or black housing.

Applications

- Hospital/healthcare equipment
- Office equipment
- Power-driven hand tools
- Fire-protection equipment

PL

Exclusive Perma-Lock™ wire terminals provide secure, easy to wire connections. Details on page 7.



Features & Benefits

Meets or Exceeds Hospital Grade UL Tests

All devices conform to UL Standards for hospital equipment #498 and #544, including:

- Abrupt plug removal (parallel to wall) test
- Ground pin retention tests
- Fault current tests
- Terminal strength test
- Face impact test
- Ground contact temperature test
- Ground resistance test
- Assembly security test
- Mold stress relief test
- Crush test
- Cord grip strain relief tests
- Static cord pull test
- Rotary cord pull test

Straight Blade Hospital Grade Selection



Amps	Poles/ Wires	Voltage	NEMA Config.	Body Color	Housing Color	Connector	Plug
15	2P 3W	125	 	white	black	8219	8215
15	2P 3W	125	 	white	transp	8219T	8215T
Hospital Grade ConnectGlow							
15	2P 3W	125	 	white	transp	8219TL	8215TL
Hospital Grade Clamp-Lock™							
15	2P 3W	125	 	white	black	CL8219	CL8215
15	2P 3W	125	 	white	transp	CL8219T	CL8215T

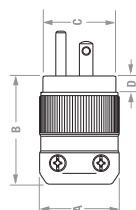


8219T

CL8219T
Clamp-Lock™

Hospital Grade Right Angle Devices

Amps	Poles/ Wires	Voltage	NEMA Config.	Plug
15	2P 3W	125		8215TRA



Dimensional drawings
and specifications
on pages 19–20

CL8215
Clamp-Lock™

Related Products



Accessories
page 37–39

OEM Available: Add suffix “.OEM” to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

Straight Blade Corrosion Resistant (15A & 20A)

Independent lab certified corrosion-resistant devices in a 240-hour 5% salt-spray test in accordance with ASTM B117

Corrosion resistant, marine grade construction with 5 year warranty.

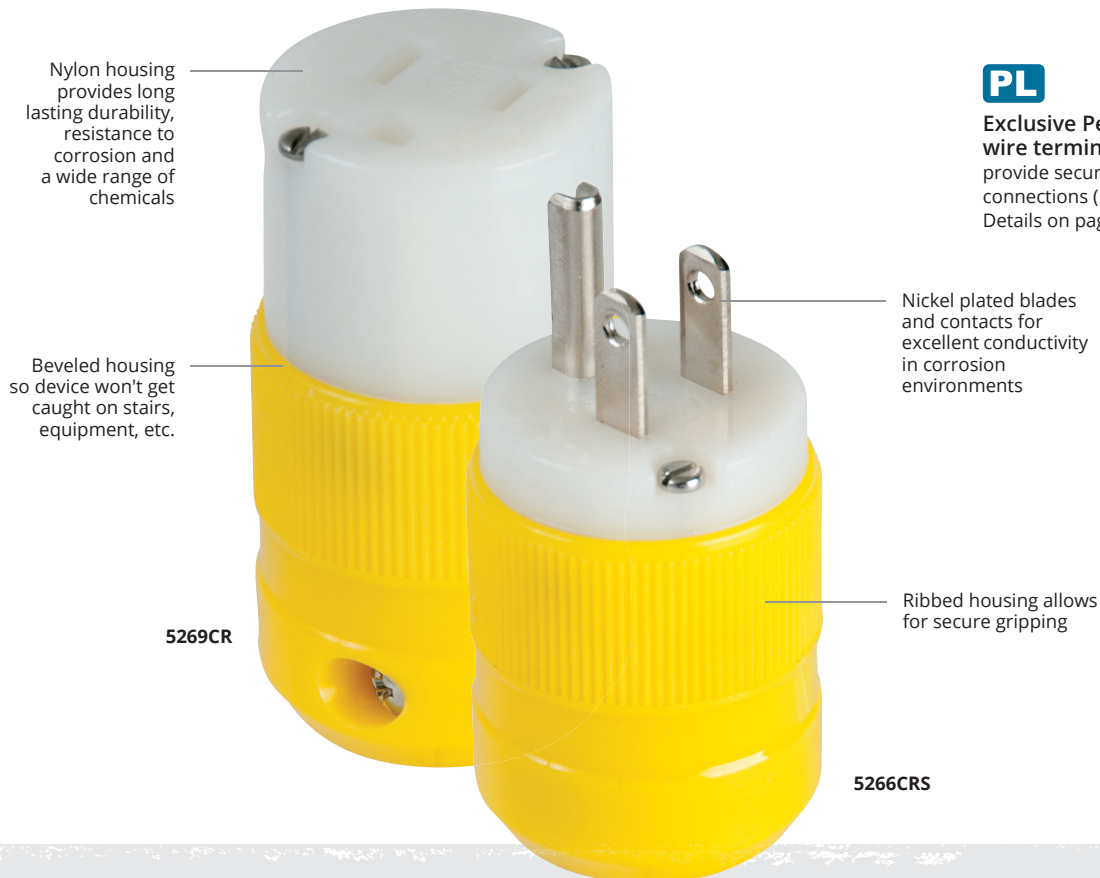
Applications

- Power-driven hand tools
- Electrical industrial equipment
- Chemical plants
- Wastewater treatment facilities
- Food and beverage plants and equipment
- Broadcast studio equipment
- Staging & entertainment equipment
- Fire-protection equipment
- Hospital/healthcare equipment
- Temporary taps at construction sites



Exclusive Perma-Lock™ wire terminals

provide secure, easy to wire connections (15A models). Details on page 7.



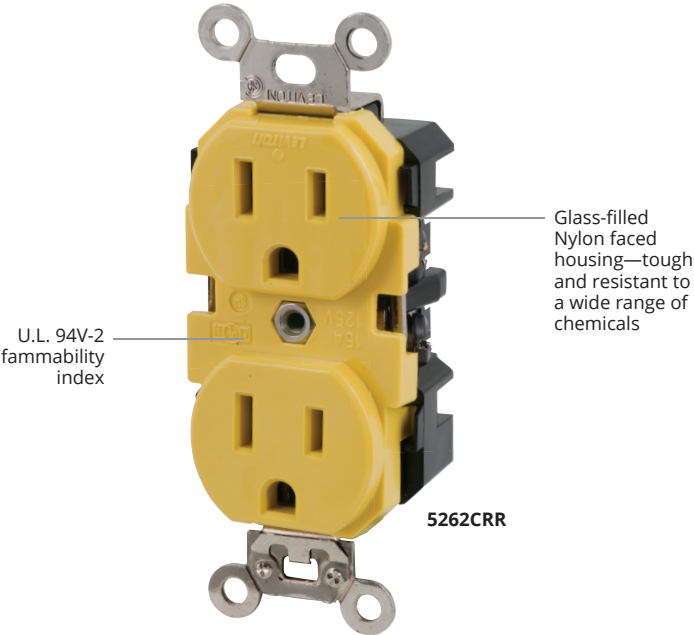
Features & Benefits

Plugs & Connectors

- Nickel plated contacts
- Thumbprint locator on cover makes it easy to align the ground blade for easier hook-up
- Accepts any 10/3 S-type (STW, STOW) cable up to 3/4" in diameter
- Clear terminal cover allows for easy inspection of wiring connection
- Plug and Connector accepts #10 through #16 gauge wires
- Exclusive cover provides superior waterproof seal
- Stainless Steel Fasteners for corrosion resistance
- Powerful strain relief with stainless screws
- Exclusive Marincor® cover provides superior waterproof seal
- Contoured weatherproof cover allows better grip

Receptacles

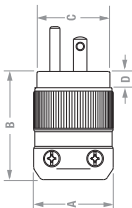
- Corrosion resistant, marine grade construction with 5 year warranty
- Nickel plated contacts
- Stainless Steel Fasteners for corrosion resistance
- Terminals and contacts—clamp type terminals provide superior wire holding. Rivetless one-piece contacts eliminate joint resistance



Straight Blade
Corrosion Resistant Selection



Amps	Poles/ Wires	Voltage	NEMA Config.		Body Color	Housing Color	Connector	Plug	Duplex Receptacle	Spring Loaded Flip Lid Inlet
15	2P 3W	125			white	yellow	5269CR	5266CRS	5262CRR	—
15	2P 3W	125			white	black	—	—	—	5278BWP
20	2P 3W	125			white	yellow	5369CR	—	—	5378BWP



Dimensional drawings
and specifications
on pages 19–20

Related Products



Accessories
page 37–39

OEM Available: Add suffix “.OEM” to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

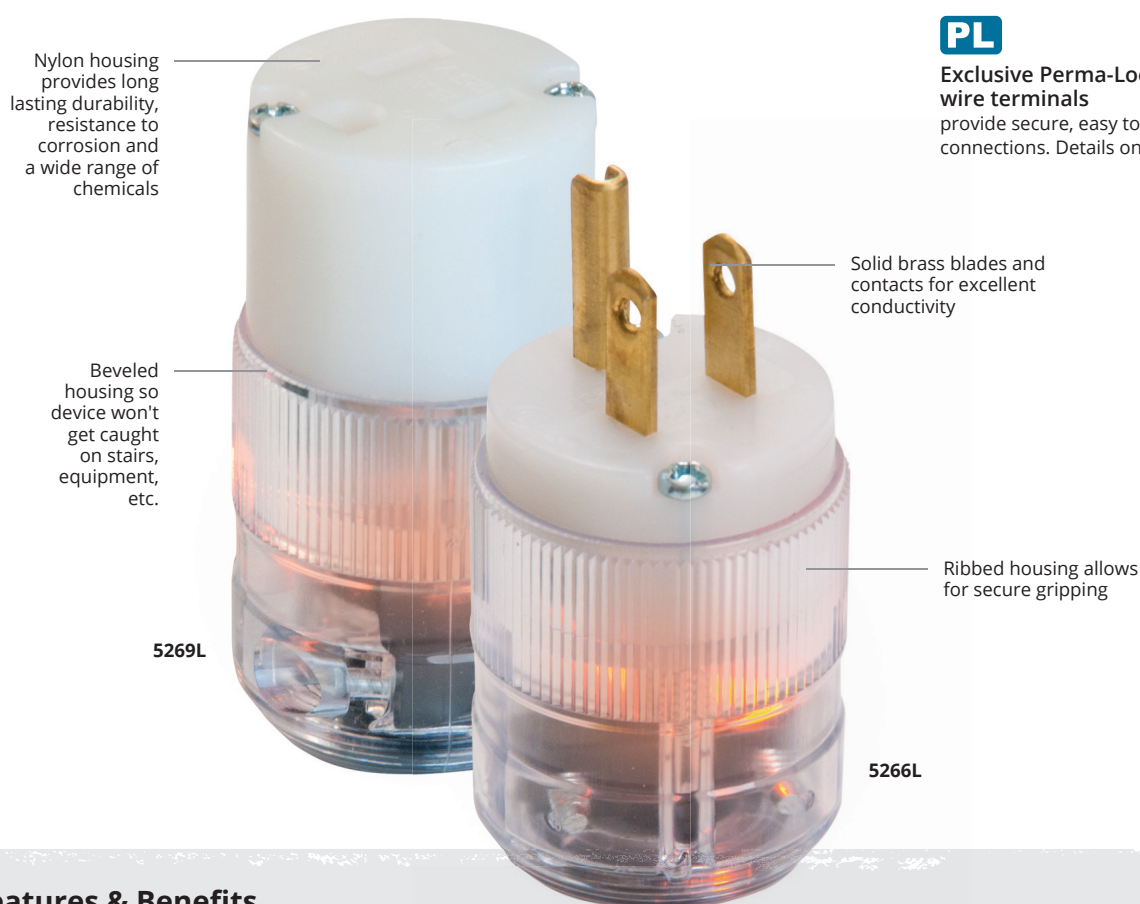
Straight Blade ConnectGlow Devices (15A)

Connectors light when a circuit is energized

Users of ConnectGlow devices know immediately if a circuit is energized because the neon bulb is energized, rather than having to perform time-consuming circuit testing. You can easily see the circuit status and determine whether there is a problem with the circuit or with the apparatus that is being connected. This is particularly helpful in applications where it is difficult to get to the connection point, such as drop cords or extension cords, or where users might not be proficient in circuit testing.

Applications

- Power-driven hand tools
- Electrical industrial equipment
- Manufacturing plants
- Broadcast studio equipment
- Staging & entertainment equipment
- Fire-protection equipment
- Hospital/healthcare equipment
- Temporary taps at construction sites


PL

Exclusive Perma-Lock™ wire terminals

provide secure, easy to wire connections. Details on page 7.

Features & Benefits

Another function is for monitoring connection status. With ConnectGlow devices, you can visually monitor a connection to assure it is maintained.

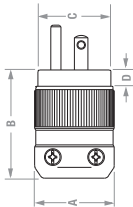
Features

- 15-, 20- and 30-amp 3-wire plugs and connectors
- Bright Neon bulb with full 360° visibility
- Mag-Vu™ window magnifies bulb and terminal for easy inspection
- 5-year limited warranty
- **Exclusive** Marinco Mag-Vu™ Windows makes visual verification of condition of terminal connections fast and easy.

Straight Blade
ConnectGlow Selection



Amps	Poles/ Wires	Voltage	NEMA Config.		Body Color	Housing Color	Connector	Plug
15	2P 3W	125			white	transp	5269L	5266L
15	2P 3W	125			white	transp	8219TL Hospital Grade	8215TL Hospital Grade



Dimensional drawings
and specifications
on pages 19–20

Related Products



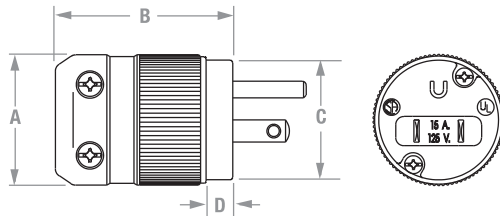
Accessories
page 37–39

OEM Available: Add suffix “.OEM” to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

Straight Blade Dimensions (15A & 20A)

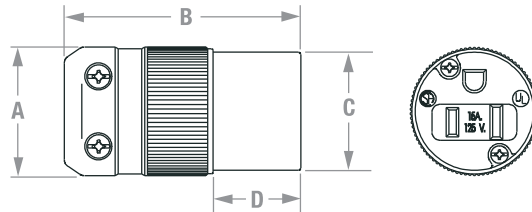
Plugs

A	B	C	D
1.47"	2.00"	1.35"	0.30"



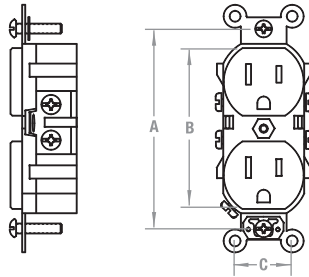
Connectors

A	B	C	D
1.47"	2.70"	1.35"	1.00"



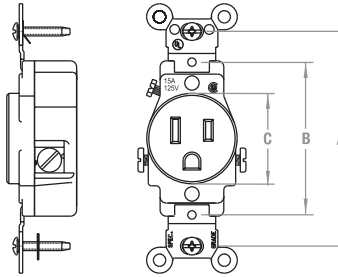
Receptacles

A	B	C
3.28"	2.64"	1.09"



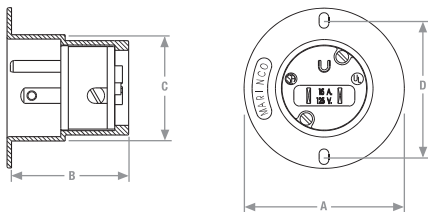
Receptacles

A	B	C
3.28"	2.37"	1.37"



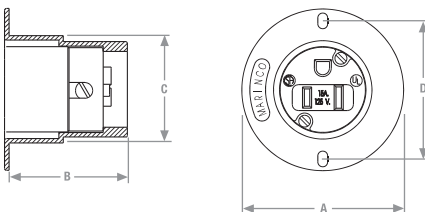
Inlets

A	B	C	D
2.57"	1.87"	1.70"	2.20"



Outlets

A	B	C	D
2.57"	1.87"	1.70"	2.20"



Straight Blade Specifications (15A & 20A)

Agency Listings	U.L. Listed File E57672 C.S.A. Certified File LR81290
Dielectric Withstand Voltage	>3,000V
Heat Rise	Maximum 30°C after 100 cycles at 150% of rated current
Current Interrupting	Yes
Terminal Accommodation	#18-10
Plugs & Connectors	
Front & Rear Housing	Nylon – Tough and resistant to a wide range of chemicals. U.L. Recognized for 125°C continuous use. U.L. 94V-2 Flammability Index.
Cord Clamp	Nylon
Terminals & Contacts	Perma-Lock™ lug-type terminals provide superior wire holding. Clamp-lock provides quick, reliable, toolless assembly
Terminal Clamps & Screws	#8 solid brass for excellent conductivity. Combo head (#2 Phillips and Slot or #1 Robertson and Slot).
Terminal Cover	Clear polycarbonate
Cord Accommodation	.300"-.655"
Receptacles	
Face and Housing	Glass-filled nylon – Tough and resistant to a wide range of chemicals. U.L. 94V-2 Flammability Index. Meets Fed Spec WC-596F. Mounting straps, rivets and grounding strip are solid brass.
Terminal Clamps & Screws	#8 solid brass for excellent conductivity.
Terminals & Contacts	Clamp-type terminals provide superior wire holding. Rivetless, one-piece contacts eliminate joint resistance.
Flanged Inlets & Outlets	
Flange & Housing	Nylon
Blades (Inlet)	Solid brass
Contacts (Outlet)	Solid brass
Terminal Screws	Solid brass
Terminal Clamps	Solid brass
Terminal Cover	Clear polycarbonate

IEC 320 Specification-Grade Connectors

Rugged Connectors for Industrial Computers, Servers, Peripherals, Utility Vehicles, Stage Lighting, Broadcast Sound & Video

- Premium IEC 320 connectors designed for critical applications perfect for harsh handling and harsh environments
- IEC 320 is the International standard for appliance power connectors
- Rugged and rewirable connectors are used to supply power to a wide range of electronic equipment
- Shock-absorbing design is less vulnerable to shattering or cracking when abused
- Exclusive Perma-Lock™ terminals for secure, easy to wire connections
- Deep funnel wire pockets to easily guide wire insertion
- Adjustable cord clamp provides superior strain relief
- Cord clamp insert allows for greatest range of cord sizes



Specifications

Amps	Poles/Wires	Voltage	IEC Config.	Connector
15	2P 3W	120		320IEC13
15	2P 3W	120		320IEC15
20	2P 3W	120		320IEC19

320IEC13 is rated for service where maximum pin temperature of mating inlet does not exceed 70°C. U.L. and C.S.A. allow its use at **15 amps**, while European agencies permit **10 amps (220–240V AC)**.

320IEC15 is rated for service where maximum pin temperature of mating inlet does not exceed 120°C. U.L. and C.S.A. allow its use at **15 amps**, while European agencies permit **10 amps (220–240V AC)**.

320IEC19 is rated for service where maximum pin temperature of mating inlet does not exceed 70°C. U.L. and C.S.A. allow its use at **20 amps**, while European agencies permit **16 amps (250V AC)**.

OEM Available: Add suffix **“.OEM”** to the Part number for bulk packaging.

Quantities vary. See your sales rep for quantity details.

Generator Cordsets

These generator cordsets offer heavy duty plug and connector design along with a super flexible industrial-grade cable. Available in 20A and 30A configurations of different lengths and wiring device configurations cover the majority of needs for smaller generator applications.

- Cordsets use yellow color STOW 10 AWG and 12 AWG wire with heavy-duty plugs and connectors that are then overmolded
- Cordsets are UL Listed & CSA certified



Amp	Wire Gauge	Length	Part #	Plug	Connector
20	12 AWG 4 conductor	10 ft	GCS124A10	L14-20P	L14-20R
		25 ft	GCS124A25	L14-20P	L14-20R
		50 ft	GCS124A50	L14-20P	L14-20R
30	10 AWG 3 conductor	10 ft	GCS103B10	L5-30P	L5-30R
		25 ft	GCS103B25	L5-30P	L5-30R
		50 ft	GCS103B50	L5-30P	L5-30R
	10 AWG 4 conductor	10 ft	GCS104C10	L14-30P	L14-30R
		25 ft	GCS104C25	L14-30P	L14-30R
		50 ft	GCS104C50	L14-30P	L14-30R
30 to (3) 15	12 AWG 3 conductor	25 ft	GCS123D25	L5-30P	5-15 triple receptacle



Options for 20 and 30A wiring devices.

Triple 15A straight blade receptacle illuminated to identify when cord is energized.

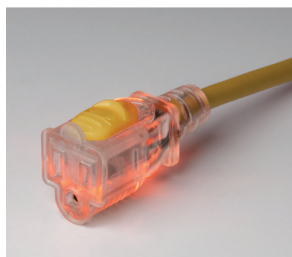


GCS103B10

15A Marine Grade & Heavy-duty Extension Cords

Marinco offers 15A marine grade extension cords. One option comes with a clear, lighted female end for visual power indication, and another option contains a slide button lock on the female end for protection against cable disconnection. Ideal for harsh conditions, the slide button lock is compatible with all other manufacturer's products. A heavy-duty option is offered for construction and rugged outdoor applications.

- Rated 15A 125V AC
- 25 & 50 feet lengths
- ETL certified to UL standards
- Marine grade SJTOW cable
- 12-14 AWG cable range



Clear ends with lighted female end for visual power indication

Cable	Length	Description	Part #
14/3	25'	Locking and Lighted	150025
	50'	Locking and Lighted	150050
	25'	Lighted	150025NL
	50'	Lighted	150050NL
12/3	25'	Heavy-duty	151225
	50'	Heavy-duty	151250

Female end contains slide button lock for protection against cable disconnection

14/3 marine grade SJTOW cable

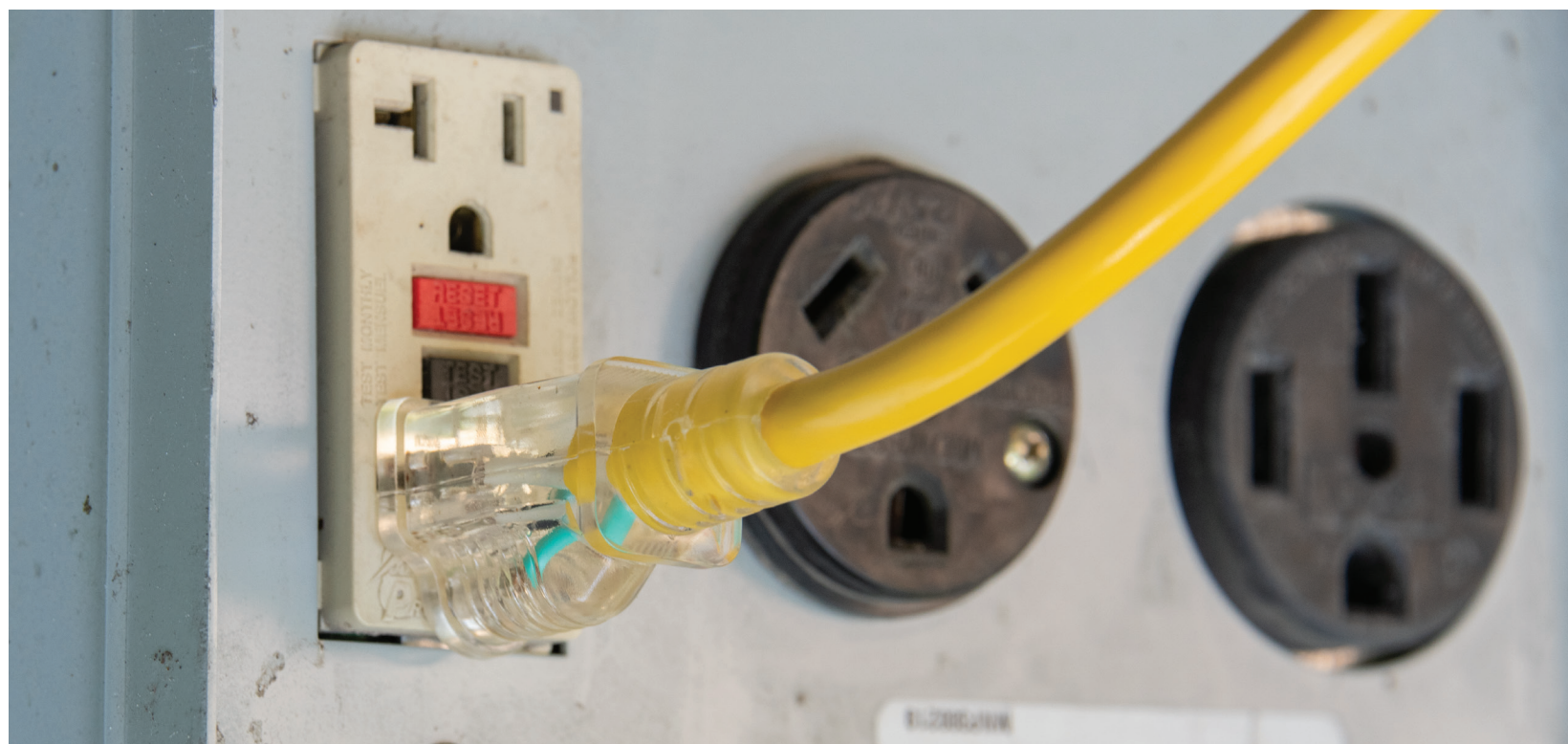
Locking and Lighted

Oversize molding for additional durability

Robust strain relief for extra cable protection

12/3 marine grade SJTOW cable for damp locations and oil resistance

Heavy-duty



Locking**Locking Devices (15A, 20A, 30A, & 50A)**

Count on Marincó for industrial-grade 15A, 20A, 30A, and 50A locking wiring devices. Heavy duty material is used for all housings to hold up to regular abuse on cordsets and equipment alike. All models are designed with the installer in mind to minimize labor and ensure ease of assembly.

Applications

- Power-driven hand tools
- Electrical industrial equipment
- Manufacturing plants
- Broadcast studio equipment
- Staging & entertainment equipment
- Fire-protection equipment
- Hospital/healthcare equipment
- Temporary taps at construction sites

PL**Exclusive Perma-Lock™ wire terminals**

provide secure, easy to wire connections (15A & 50A models). Details on page 7.

**Plugs & Connectors**

- Rear housing key fits into front portion for ease of assembly
- Cord clamp screws are recessed in housing for neat, clean appearance
- Adjustable cord clamp provides superior strain relief
- Close-in wire entrance holes and generous wiring space make it easy to wire
- Terminals are open, ready to wire for quickest assembly
- Dust seal keeps contaminants out of wiring chamber
- Thick walled nylon housing resists abuse, corrosion and most chemicals
- Devices are clearly marked with amperage, voltage, rating, and NEMA configuration
- U.L. Listed and C.S.A. Certified for make or break under load
- Cord clamp screws are recessed in housing for neat, clean appearance
- Color coded wire entrance holes make devices simple and easy to wire
- Neoprene Dust seal keeps contaminants out of wiring chamber
- Stainless steel plug sleeve provides greater strength and protection (50A only)
- Non-metallic shell around the plug sleeve eliminates exposed metal parts (50A only)



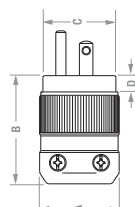
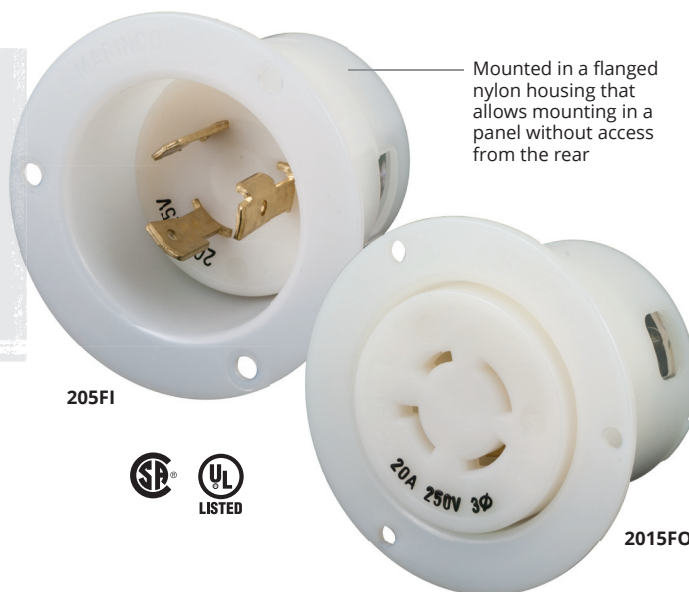
Glass-filled nylon body and face provides excellent impact, heat and chemical resistance

Receptacles

- Glass-filled nylon body and face provides excellent impact, heat and chemical resistance
- Boss diameter is 1.56" for 20 and 30 amp devices
- Heavy duty brass mounting strap and grounding system provides low resistance ground path and superior corrosion resistance
- Terminal combo head screws are clearly marked in accordance with the National Electrical Code
- U.L. Listed and C.S.A. Certified for make or break under load (20A & 30A only)

Flanged Inlets & Outlets

- Similar design features as plugs and connectors
- Clean design eliminates assembly screws from the front of the Inlets & Outlets



Dimensional drawings and specifications on pages 33-36

Selection on following pages

Locking

Standard NEMA Selection
(15A, 20A & 30A)

Amps	Poles/ Wires	Voltage	NEMA Config.	Body Color	Housing Color	Connector	Plug	Single Receptacle	Duplex Receptacle	Flanged Inlet	Flanged Outlet
15	2P 3W	125	 L5-15R L5-15P	white	black	4729	4720	4710	4700	4716	4715
15	2P 3W	125	 L5-15R L5-15P	black	black	4729BL	4720BL	—	—	—	—
15	2P 3W	250	 L6-15R L6-15P	white	black	4579	4570	4560	4550	4586	4585
15	2P 3W	277	 L7-15R L7-15P	white	black	4779	4770	4760	—	4786	4785
20	2P 3W	125	 L5-20R L5-20P	white	black	205C	205P	205R	—	205FI	205FO
20	2P 3W	125	 L5-20R L5-20P	black	black	205CBL	205PBL	—	—	—	—
20	2P 3W	250	 L6-20R L6-20P	white	black	206C	206P	206R	—	206FI	206FO
20	2P 3W	250	 L6-20R L6-20P	black	black	206CBL	206PBL	—	—	—	—
20	2P 3W	277	 L7-20R L7-20P	white	black	—	207P	—	—	—	—
20	3P 4W	125/250	 L14-20R L14-20P	white	black	2014C	2014P	2014R	—	2014FI	2014FO
20	3P 4W	3Ø 250	 L15-20R L15-20P	white	black	2015C	2015P	2015R	—	2015FI	2015FO
20	3P 4W	3Ø 480	 L16-20R L16-20P	white	black	2016C	2016P	2016R	—	—	—
20	4P 5W	3ØY 120/208	 L21-20R L21-20P	white	black	2021C	2021P	2021R	—	—	2021FO
30	2P 3W	125	 L5-30R L5-30P	white	black	305C	305P	305R	—	305FI	305FO
30	2P 3W	250	 L6-30R L6-30P	white	black	306C	306P	306R	—	306FI	306FO
30	3P 4W	125/250	 L14-30R L14-30P	white	black	3014C	3014P	3014R	—	3014FI	3014FO
30	3P 4W	3Ø 250	 L15-30R L15-30P	white	black	3015C	3015P	3015R	—	3015FI	3015FO
30	3P 4W	3Ø 480	 L16-30R L16-30P	white	black	3016C	3016P	3016R	—	—	3016FO
30	4P 5W	3ØY 120/208	 L21-30R L21-30P	white	black	3021C	3021P	3021R	—	3021FI	3021FO

Right-Angle Adapter with Cord Grip

- Accommodates .456" to 1.150" cords
- Available in black
- Fits 20 and 30 amp 4 wire and 5 wire locking devices
- Compatible with plugs 4720, 4570, and 4770

Part # **45WRA.OEM**

Locking

Standard Non-NEMA Selection
(20A & 50A)

Amps	Poles/ Wires	Voltage	Config.	Body Color	Housing Color	Connector	Plug	Receptacle	Flanged Inlet	Flanged Inlet w/ spring loaded lid
20	4P 4W	3ØY 120/208	R P Replacement use only	white	black	7413C	7411C	—	—	—
50	2P 3W	125	R P Calif. Standard	white	black	CS6360N	CS6361N	CS6370	—	CS6377SD
50	2P 3W	250	R P Calif. Standard	white	black	CS8264N	CS8265N	CS8269	CS8275	—
50	2P 3W	250 DC 600 AC	R P Replacement use only	white	black	3762N	3763N	3771	3777	—
50	2P 3W	480	R P Calif. Standard	white	black	CS8464N	CS8465N	CS8469	—	—
50	3P 4W	125/250	R P Calif. Standard	white	black	CS6364N	CS6365N	CS6369	CS6375	CS6375FL
50	3P 4W	3Ø 250	R P Calif. Standard	white	black	CS8364N	CS8365N	CS8369	CS8375	—
50	3P 4W	250 DC 600 AC	R P Replacement use only	white	black	3764N	3765N	3769	3775	—
50	3P 4W	250 DC 600 AC	R P Replacement use only	white	black	7764N	7765N	—	7958	—
50	3P 4W	3Ø 480	R P Calif. Standard	white	black	CS8164N	CS8165N	CS8169	CS8175	—



305C
30A Connector



CS8265N
50A Plug



305R
30A Receptacle



4760
15A Receptacle



305FI
30A Inlet



CS6375FL
50A Inlet w/lid

Related Products



Accessories
page 37-39

OEM Available: Add suffix “.OEM” to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

Locking

ConnectGlow Devices

Connectors light when a circuit is energized

Users of ConnectGlow devices know immediately if a circuit is energized because the neon bulb is energized, rather than having to perform time-consuming circuit testing. You can easily see the circuit status and determine whether there is a problem with the circuit or with the apparatus that is being connected. This is particularly helpful in applications where it is difficult to get to the connection point, such as drop cords or extension cords, or where users might not be proficient in circuit testing.

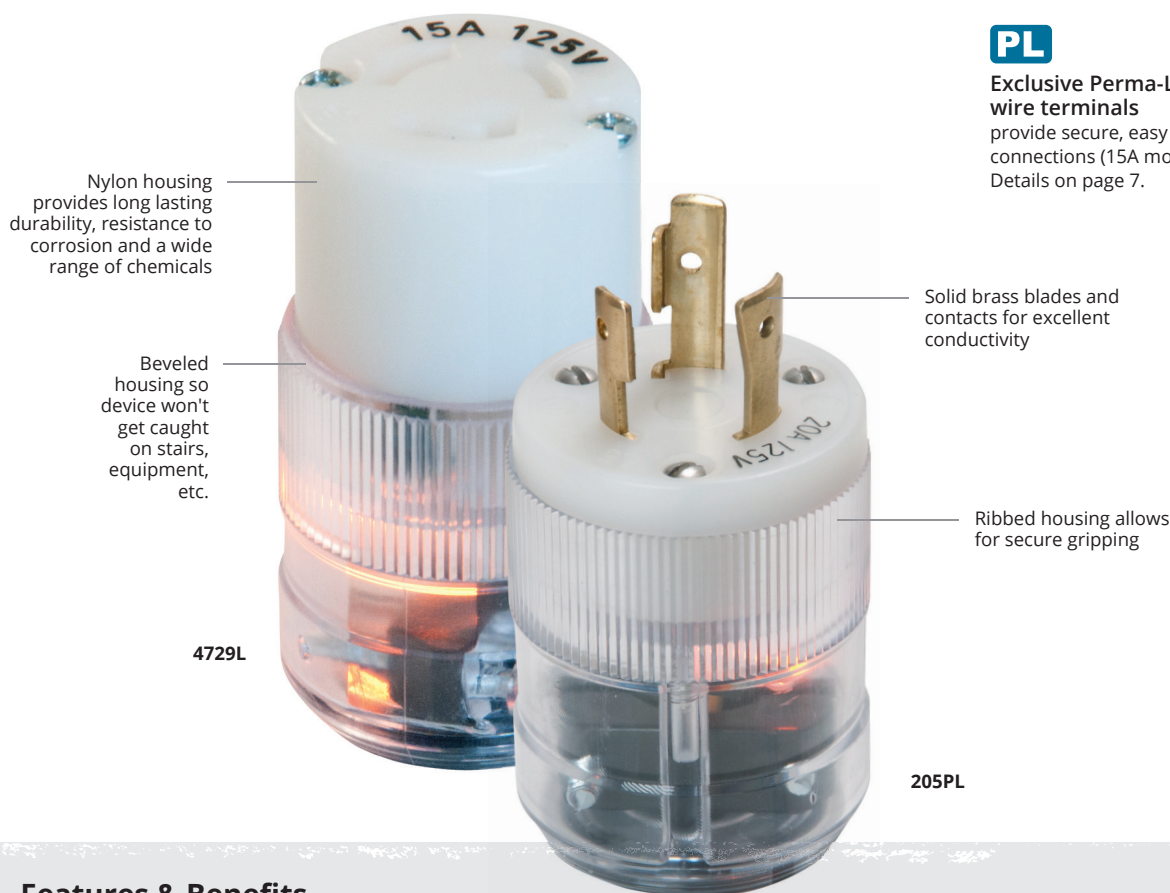
Applications

- Power-driven hand tools
- Electrical industrial equipment
- Manufacturing plants
- Broadcast studio equipment
- Staging & entertainment equipment
- Fire-protection equipment
- Hospital/healthcare equipment
- Temporary taps at construction sites

PL

Exclusive Perma-Lock™ wire terminals

provide secure, easy to wire connections (15A models). Details on page 7.



Features & Benefits

Another function is for monitoring connection status. With ConnectGlow devices, you can visually monitor a connection to assure it is maintained.

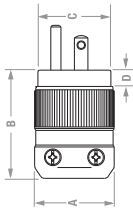
Features

- 15A and 20A 3-wire plugs and connectors
- Bright Neon bulb with full 360° visibility
- Mag-Vu™ window magnifies bulb and terminal for easy inspection
- 5-year limited warranty
- **Exclusive** Marinco Mag-Vu™ Windows makes visual verification of condition of terminal connections fast and easy.

Locking

ConnectGlow Selection

Amps	Poles/ Wires	Voltage	NEMA Config.		Body Color	Housing Color	Connector	Plug
ConnectGlow								
15	2P 3W	125			white	transp	4729L	4720L
20	2P 3W	125						



Dimensional drawings
and specifications
on pages 33-36



205CL



4270L

Related Products



OEM Available: Add suffix “.OEM” to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

Locking**Corrosion Resistant Devices**

Independent lab certified corrosion-resistant devices in a 240-hour 5% salt-spray test in accordance with ASTM B117

Corrosion resistant, marine grade construction with 5 year warranty.

**Exclusive Perma-Lock™ wire terminals**

provide secure, easy to wire connections (15A & 50A models). Details on page 7.

**Applications**

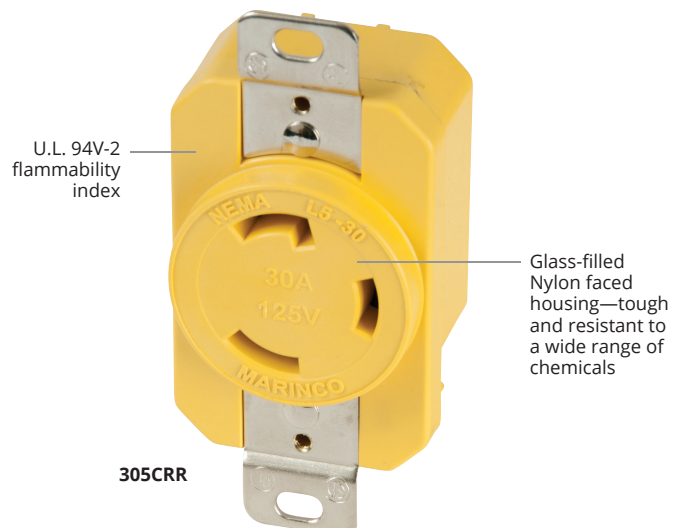
- Power-driven hand tools
- Electrical industrial equipment
- Manufacturing plants
- Broadcast studio equipment
- Staging & entertainment equipment
- Fire-protection equipment
- Hospital/healthcare equipment
- Temporary taps at construction sites

Plugs & Connectors

- Nickel plated contacts
- Thumbprint locator on cover makes it easy to align the ground blade for easier hook-up
- Accepts any 10/3 S-type (STW, STOW) cable up to 3/4" in diameter
- Clear terminal cover allows for easy inspection of wiring connection
- Plug and Connector accepts #16 to #10 gauge wires
- Exclusive cover provides superior waterproof seal
- Stainless Steel Fasteners for corrosion resistance
- Powerful strain relief with stainless screws
- Exclusive Marincor® cover provides superior waterproof seal
- Contoured weatherproof cover allows better grip

Receptacles

- Corrosion resistant, marine grade construction with 5 year warranty
- Nickel plated contacts
- Stainless Steel Fasteners for corrosion resistance
- Terminals and contacts—clamp type terminals provide superior wire holding. Rivetless one-piece contacts eliminate joint resistance

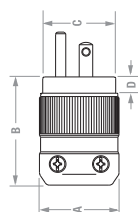


Locking

Corrosion Resistant Selection

Amps	Poles/ Wires	Voltage	NEMA Config.	Body Color	Housing Color	Connector	Plug	Single Receptacle	Duplex Receptacle
15	2P 3W	125	  L5-15R L5-15P	white	black	4731CR	4721CR	—	4700CR
20	2P 3W	125	  L5-20R L5-20P	white	yellow	205CRCN	205CRPN	205CRR	—
30	2P 3W	125	  L5-30R L5-30P	white	black	305BC	305BP	305CRRB	—
30	2P 3W	125	  L5-30R L5-30P	white	yellow	305CRCN	305CRPN	305CRR	—
50	2P 3W	125	  SS-1	white	yellow	6360CRN	6361CRN	6370CR	—
50	3P 4W	125/250	  SS-2	white	yellow	6364CRNS	6365CRN	—	—
50	3P 4W	125/250	  SS-2	white	black	—	—	6369CRS	—

Note: 50A corrosion resistant devices are not CS (California Standard).



Dimensional drawings
and specifications
on pages 33–36

Related Products



Accessories
page 37–39



6370CR



6370CR



6370CR



4700CR

OEM Available: Add suffix “.OEM” to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

Locking

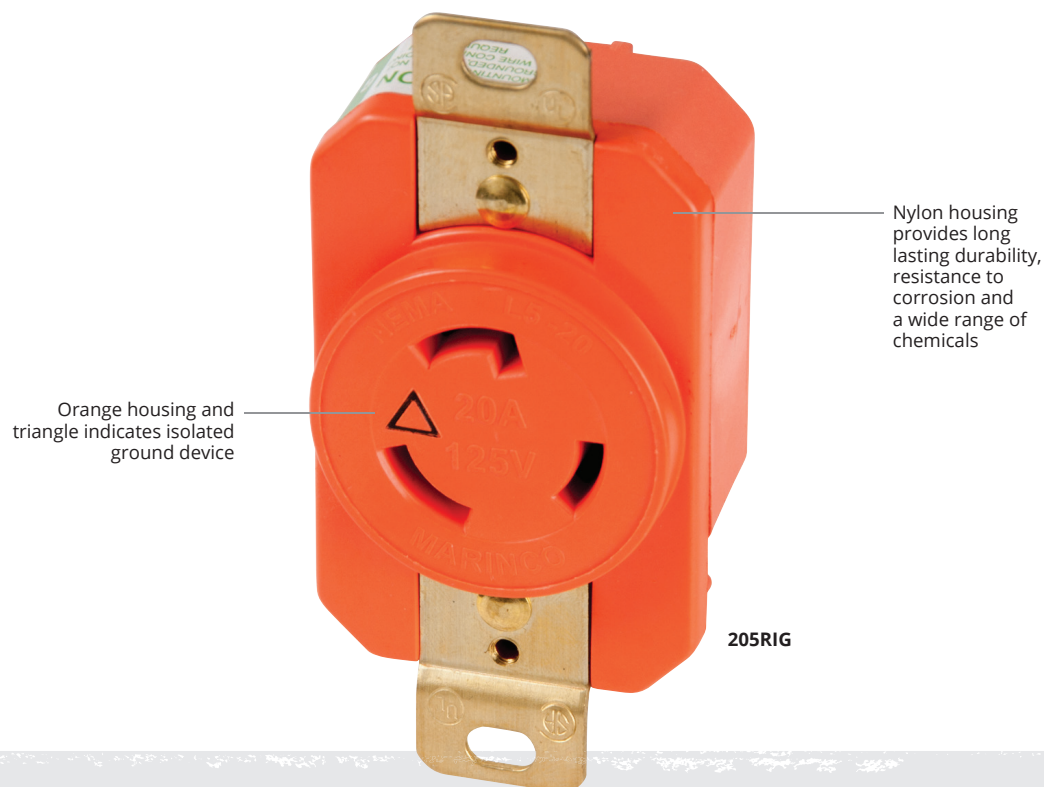
Isolated Ground Devices

For noise sensitive applications. All Marincos Isolated Ground devices are orange, with an triangle indicating isolated ground.

Equipment requiring an isolated ground should use an isolated ground plug (orange housing) to show that the equipment should be connected to an isolated ground receptacle.

Applications

- Broadcast studio equipment
- Staging & entertainment equipment
- Fire-protection equipment
- Hospital/healthcare equipment



Features & Benefits

Conventional receptacles have grounding contacts that are connected to the box, fittings, conduit and all other building ground system components, which can act as a large antenna for EMI and RFI.

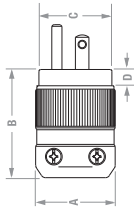
The ground terminals on Marincos IG-receptacles are designed to directly connect only to the service entrance grounding system, per NEC Article 250.146(D).

Locking
Isolated Ground Selection

Amps	Poles/ Wires	Voltage	NEMA Config.		Body Color	Housing Color	Single Receptacle
20	2P 3W	125			orange	orange	205RIG
			L5-20R	L5-20P			
20	2P 3W	250			orange	orange	206RIG
			L6-20R	L6-20P			
30	2P 3W	125			orange	orange	305RIG
			L5-30R	L5-30P			
30	2P 3W	250			orange	orange	306RIG
			L6-30R	L6-30P			



306RIG



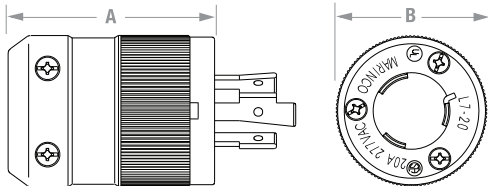
Dimensional drawings
and specifications
on pages 33–36

OEM Available: Add suffix “.OEM” to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

Dimensions (20A & 30A)

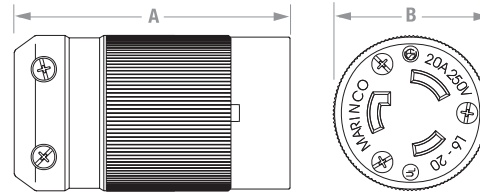
Plugs

	A	B
3 Wire	2.54"	1.84"
4 & 5 Wire	3.04"	2.11"



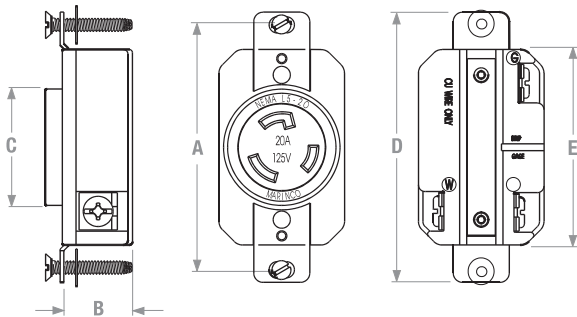
Connectors

	A	B
3 Wire	3.55"	1.84"
4 & 5 Wire	4.10"	2.11"



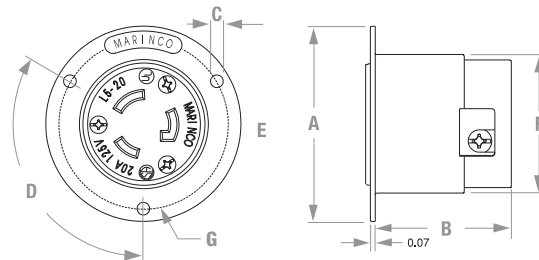
Receptacles

	A	B	C	D	E
3 Wire	3.28"	.97"	1.56"	3.63"	2.38"
4 & 5 Wire	3.28"	.97"	1.56"	3.63"	2.38"



Inlets & Outlets

	A	B	C	D	E	F	G
3 Wire	2.88"	2.00"	.185"	120°	1.25"	2.04"	2.50
4 & 5 Wire	3.02"	1.93"	.185"	120°	1.35"	2.19"	2.68



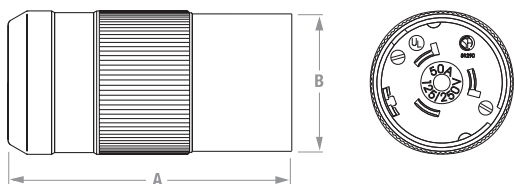
Specifications (20A & 30A)

Dielectric Withstand Voltage	>3,000V
Heat Rise	Maximum 30°C after 100 cycles at 150% of rated current.
Current Interrupting	Yes
Plugs & Connectors	
Front & Rear Housing	Nylon – Tough and resistant to a wide range of chemicals. U.L. Recognized for 125°C continuous use. U.L. 94V-2 Flammability Index.
Cord Clamp	Nylon
Terminals & Contacts	Solid brass
Terminal Clamps & Screws	#10 solid brass for excellent conductivity.
Terminal Cover	Clear polycarbonate
Agency Listings	U.L. Listed File E57672 C.S.A. Certified File LR81290
Cord Accommodation	3-wire: .275"–.780" 4 & 5-wire: .456"–1.150"
Terminal Accommodation	3-wire: #16–10 4 & 5-wire: #14–8
Receptacles	
Face and Housing	Glass-filled nylon – Tough and resistant to a wide range of chemicals. U.L. Recognized for 130°C continuous use. U.L. 94V-O Flammability Index. Mounting straps, rivets and grounding strip are solid brass.
Terminal Clamps & Screws	#10 solid brass for excellent conductivity. Can accept up to a #6 ring terminal.
Agency Listings	U.L. Listed File E111198 C.S.A. Certified File LR81290
Terminals & Contacts	Clamp-type terminals provide wire holding. Rivetless, one-piece contacts eliminate joint resistance.
Terminal Accommodation	#14–8
Flanged Inlets & Outlets	
Flange & Housing	Nylon
Blades (Inlet)	Solid brass
Contacts (Outlet)	Solid brass
Terminal Screws	Solid brass
Terminal Clamps	Solid brass
Terminal Cover	Clear polycarbonate

Dimensions (50A)

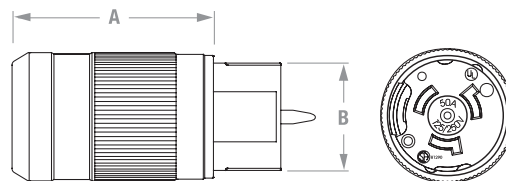
Plugs

A	B
4.73"	2.29"



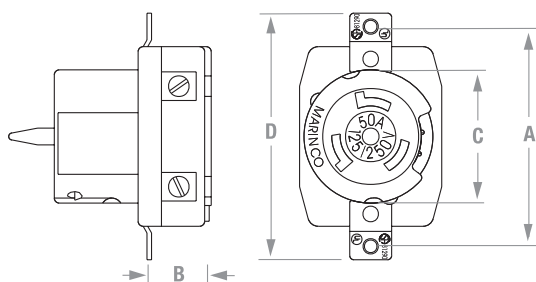
Connectors

A	B
3.72"	1.98"



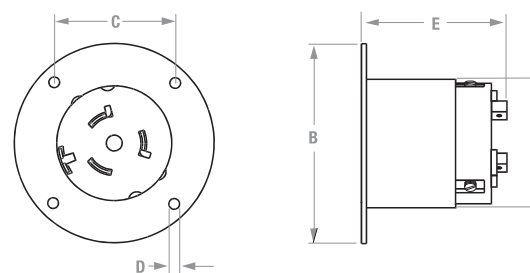
Receptacles

A	B	C	D
3.28"	1.08"	1.98"	3.68"



Inlets

A	B	C	D	E
2.25"	3.50"	3.00"	.18"	2.63"



Specifications (50A)

Dielectric Withstand Voltage	>3,000V
Heat Rise	Maximum 30°C after 100 cycles at 150% of rated current.
Current Interrupting	Yes
Plugs & Connectors	
Gasket	Neoprene
Assembly Screws	Stainless steel
Body	Nylon
Cord Clamps	Glass-filled nylon
Plug Shroud	Stainless steel with PVC exterior
Blades	Solid brass (plugs)
Contacts	Copper alloy (connectors)
Terminal Clamps & Screws	Brass
Agency Listings	U.L. Listed File E57672 C.S.A. Certified File LR81290
Cord Accommodation	.680"-1.125"
Terminal Accommodation	#10-4
Receptacles	
Body	Glass-filled nylon
Ground Strap	Brass
Contacts	Brass
Terminal Screws	Brass
Terminal Clamps	Brass
Terminal Accommodation	#10-6
Flanged Inlets & Outlets	
Flange Housing	Nylon
Insulator	Nylon
Blades	Brass
Terminal Clamps	Brass
Terminal Accommodation	#10-4

Accessories—Covers / Sealing Rings / Cap

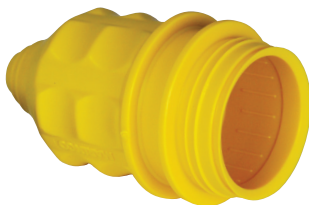
Plug Covers



Plug Cover

- Cover for 15A & 20A straight blade plugs and 15A locking plugs (5266, 5366, 5466, 5666, 5269, 5369, 5469, 5669)
- Black

6017



Waterproof Plug Cover

- Cover for 20A & 30A locking plugs
- Yellow

102N



Waterproof Plug Cover

- Cover for 50A connectors
- Yellow

7715CRN

Connector Covers



Connector Cover

- Cover for 15A & 20A straight blade connectors and 15A locking connectors
- Black

6018



Waterproof Connector Cover

- Cover for 20A & 30A locking connectors
- Yellow

103RN

103RN.OEM OEM packaging



Waterproof Connector Cover

- Cover for 50 amp plugs
- Yellow

7717N

yellow

102182

white



Charger Connector Cover

- Connector cover for charger inlet
- Yellow
- Available in OEM packaging only

1520BI.OEM

Related Products



Straigh Blade
Plugs & Connectors
start on page 9



Locking
Plugs & Connectors
start on page 23



Raintight Cover

Use with all Marinco 15A and 20A straight blade, as well as 15A locking, flanged inlets and outlets. Standard: black

WP1



Weatherproof Cover

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

7420CRS yellow
7420GY gray



Weather-Resistant Cover

Low cost, quick assembly. Spring-loaded flip lid. Fits 3-, 4- and 5-wire, single receptacles. Black plastic.

2030FL



Weatherproof Cover

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

7788CRS yellow
7788GY gray
7788BL black



Sealing Collar w/ Threaded Ring

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

510R



Sealing Collar w/ Threaded Ring

- Provides maximum moisture protection between cordset & adapter
- Use with 20 & 30 amp locking systems

110R



Threaded Sealing Ring

- Use with 30 amp systems

100R



Threaded Locking Sealing Ring

- Use with 50 amp systems

500R



Watertight Connector Cap

- For use on 16 or 32 amp products for CE compliance
- For use on 30 or 50 amp products to protect the connector when not in use (not compatible with California standard 50 amp devices)

199109PK 16A/30A
199110PK 32A/50A

Related Products



Straigh Blade
Devices
start on page 9



Locking Devices
start on page 23

One-Piece Adapters

These adapters do not have covers and are not recommended for use in wet locations.



Part #	Connector End	Plug End
S20-15	 15A or 20A 125V Straight Blade	 20A 125V Locking
S30-15	 15A or 20A 125V Straight Blade	 30A 125V Locking
S15-30	 30A 125V Locking	 15A 125V Straight Blade
S20-30	 30A 125V Locking	 20A 125V Locking
125W*	 30A RV Connector	 30A 125V Locking

*125W is not CSA approved

Pigtail Adapters

These adapters are equipped with covers and sealing collars (where indicated), and are for use in wet locations. Marincos unique sealing collar system with MarineGuard II cover joins the adapter to the cordset with a positive, mechanical connection which provides maximum moisture protection.



Part #	Connector End	Plug End
104SPP	 30A 125V Locking with Sealing Collar System	 15A 125V Straight Blade with Locking Screw
105SPP	 15A 125V Straight Blade	 30A 125V Locking

"Y" Adapters

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



Part #	Color	Connector End	Plug End
152AY	yellow	 (2) 30A 125V Locking w/ Sealing Collar System	 50A 125V Locking
153AY	yellow	 (2) 30A 125V Locking w/ Sealing Collar System	 50A 125/250V Locking
157AY	yellow	 (2) 30A 125V Locking w/ Sealing Collar System	 30A 125V Locking
165AYB-NC	black	—	Wire only (no ends) #6G 4 Conductor Wire

165AYB-NC

NEMA: Product Selection Guide

Straight Blade

Poles/ Wires	Voltage	NEMA Config.	AC HP rating	Application Type	Connector	Plug	Receptacle Duplex	Flanged Inlet	Outlet	Dust-resistant Inlet	Outlet	Cat. Pg.	
15 Amp													
2P 3W	125V	 5-15R	 5-15P	.5	Spec. Grade	5269	5266	5252	5278	5279	5278DRI	5279DRO	10
					Clamp-Lock	CL5269	CL5266	—	—	—	—	—	12
					ConnectGlow	5269L	5266L	—	—	—	—	—	17
					Right Angle	—	5266RA	—	—	—	—	—	10
					Corrosion-Rst.	5269CR	5266CRS	5262CRR	—	—	—	—	16
					All Black	5269BL	5266BL	—	5278BL	5279BL	150BBI	—	10
					Clamp-Lock	CL5269BL	CL5266BL	—	—	—	—	—	12
					Hosp. Grade	8219	8215	—	—	—	—	—	14
					Clamp-Lock	CL8219	CL8215	—	—	—	—	—	12
					Hosp. Grade	8219T	8215T	—	—	—	—	—	14
					Clamp-Lock	CL8219T	CL8215T	—	—	—	—	—	12
					Right Angle	—	8215TRA	—	—	—	—	—	14
					Hosp. Grade	8219TL	8215TL	—	—	—	—	—	17
2P 3W	250V	 6-15R	 6-15P	1.5	Spec. Grade	5669	5666	—	5678	5679	5678DRI	—	10
					Clamp-Lock	CL5669	CL5666	—	—	—	—	—	12
					20 Amp								
2P 3W	125V	 5-20R	 5-20P	1	Spec. Grade	5369	5366	5352	5378	5379	200BBI.RV	5379DRO	10
					Clamp-Lock	CL5369	CL5366	—	—	—	—	—	12
					Corrosion-Rst.	5369CR	—	—	—	—	—	—	16
2P 3W	250V	 6-20R	 6-20P	2	Spec. Grade	5469	5466	5462	5478	5479	5478DRI	5479DRO	10

IEC

Poles/ Wires	Voltage	IEC config.	Application Type	Connector	Cat. Pg.
15 Amp					
2P 3W	120V		IEC320	320IEC13	21
			IEC320	320IEC15	21
20 Amp					
2P 3W	120V		IEC320	320IEC19	21

NEMA Locking

Poles/ Wires	Voltage	NEMA Config.	AC HP rating	Application Type	Connector	Plug	Receptacle Single	Duplex	Flanged Inlet	Outlet	Cat. Pg.	
15 Amp												
2P 3W	125V	 L5-15R	 L5-15P	.5	Spec. Grade	4729	4720	4710	4700	4716	4715	25
					ConnectGlow	4729L	4720L	—	—	—	—	28
					Corrosion-Rst	4371CR	4721CR	—	4700CR	—	—	30
					All Black	4729BL	4720BL	—	—	—	—	25
2P 3W	250V	 L6-15R	 L6-15P	2	Spec. Grade	4579	4570	4560	4550	4586	4585	25
2P 3W	277V	 L7-15R	 L7-15P	2	Spec. Grade	4779	4770	4760	—	4786	4785	25

Product Selection Guide

NEMA Locking

Poles/ Wires	Voltage	NEMA Config.		AC HP Rating	Application Type	Connector	Plug	Receptacle Single	Flanged Inlet	Flanged Outlet	Cat. Pg.
20 Amp											
2P 3W	125	 L5-20R	 L5-20P	1	Spec. Grade	205C	205P	205R	205FI	205FO	25
					ConnectGlow	205CL	205PL	—	—	—	28
					Corrosion-Rst.	205CRCN	205CRPN	205CRR	—	—	30
					All Black	205CBL	205PBL	—	—	—	25
					Isolated Grnd.	—	—	205RIG	—	—	32
2P 3W	250	 L6-20R	 L6-20P	2	Spec. Grade	206C	206P	206R	206FI	206FO	25
					All Black	206CBL	206PBL	—	—	—	25
					Isolated Grnd.	—	—	206RIG	—	—	32
2P 3W	277	 L7-20R	 L7-20P	2	Spec. Grade	—	207P	—	—	—	25
3P 4W	125/250	 L14-20R	 L14-20P	2(1)	Spec. Grade	2014C	2014P	2014R	2014FI	2014FO	25
	3ø 250	 L15-20R	 L15-20P	3	Spec. Grade.	2015C	2015P	2015R	2015FI	2015FO	25
	3ø 480	 L16-20R	 L16-20P	5	Spec. Grade	2016C	2016P	2016R	—	—	25
4P 5W	3ø Y 120/208	 L21-20R	 L21-20P	2	Spec. Grade	2021C	2021P	2021R	—	2021FO	25
30 Amp											
2P 3W	125	 L5-30R	 L5-30P	2	Spec. Grade	305C	305P	305R	305FI	305FO	25
					Corrosion-Rst.	305BC	305BP	305CRRB	—	—	30
					Corrosion-Rst.	305CRCN	305CRPN	305CRR	—	—	30
					Isolated Grnd.	—	—	305RIG	—	—	32
2P 3W	250	 L6-30R	 L6-30P	2	Spec. Grade	306C	306P	306R	306FI	306FO	25
					Isolated Grnd.	—	—	306RIG	—	—	32
3P 4W	125/250	 L14-30R	 L14-30P	2	Spec. Grade	3014C	3014P	3014R	3014FI	3014FO	25
	3ø 250	 L15-30R	 L15-30P	3	Spec. Grade	3015C	3015P	3015R	3015FI	3015FO	25
	3ø 480	 L16-30R	 L16-30P	10	Spec. Grade.	3016C	3016P	3016R	—	3016FO	25
4P 5W	3Ø Y 120/208	 L21-30R	 L21-30P	3	Spec. Grade	3021C	3021P	3021R	3021FI	3021FO	25

Product Selection Guide

Non-NEMA Locking

Poles/ Wires	Voltage	NEMA Config.	Application Type	Connector	Plug	Receptacle Single	Flanged Inlet	Flanged Inlet w/ Lid	Cat. Pg.
20 Amp									
4P 4W	3Ø Y 120/208	 Replacement use only	Spec. Grade	7413C	7411C	—	—	—	26
50 Amp									
2P 3W	125	 Calif. Standard	Spec. Grade	CS6360N	CS6361N	CS6370	—	—	26
		 SS1-50	Corrosion-Rst.	6360CRN	6361CRN	6370CR	—	—	30
2P 3W	250	 Calif. Standard	Spec. Grade	CS8264N	CS8265N	CS8269	CS8275	—	26
	250DC/ 600AC	 Replacement use only	Spec. Grade	3762N	3763N	3771	3777	—	26
	480	 Calif. Standard	Spec. Grade	CS8464N	CS8465N	CS8469	—	—	26
	125/250	 Calif. Standard	Spec. Grade	CS6364N	CS6365N	CS6369	CS6375	CS6375FL	26
3P 4W	125/250	 SS2-50	Corrosion-Rst.	6364CRNS	6365CRN	6369CRS	—	—	30
	3Ø 250	 Calif. Standard	Spec. Grade	CS8364N	CS8365N	CS8369	CS8375	—	26
	250DC/ 600AC	 Replacement use only	Spec. Grade	3764N	3765N	3769	3775	—	26
	250DC/ 600AC	 Replacement use only	Spec. Grade	7764N	7765N	—	7958	—	26
	3Ø 480	 Calif. Standard	Spec. Grade	CS8164N	CS8165N	CS8169	CS8175	—	26

Non-NEMA Locking

Mastervolt Power Cables				
	Part Number			
Power cable	121160150	16 A	15 metre	2.5 mm ²
Power cable	121160250	16 A	25 metre	2.5 mm ²
Power cable	121320250	25 A	25 metre	4 mm ²
Yellow moulded oil resistant cable	120301000		25 metre	3 x 2.5 mm ²
Yellow moulded oil resistant cable	120300100		Per metre	3 x 2.5 mm ²
Yellow moulded oil resistant cable	120301400		Per metre	3 x 4 mm ²
Connection cable	121160251		25 metre	2.5 mm ²
Adapter, from CEE 7/7 to CEE plug, with current indicator	121160900			
Adapter, from CEE to CEE 7/7 plug	121160910			
Splitter for CEE plug with current indicator	121160920			
Stainless steel inlet, 2+PE,	121160000	16 A / 230 V		
Stainless steel inlet, 2+PE	121320000	32 A / 230 V		
Stainless steel shore connection kit, 2+PE		32 A / 230 V		



CAM TECH DEVICES

CAM Technology

Cam Technology devices from Maringo are part of the Advanced Devices family of products. Originally an independent manufacturer, Advanced Devices was acquired by Maringo in 2004 so Maringo could offer this line of innovative high-amperage products to its industrial customers.

While developed to meet the demanding requirements of the entertainment industry – and continuing to be heavily used there – Cam Technology products have found acceptance in industrial applications because the devices feature rugged design, proven, durable materials and precise assembly. These characteristics make Cam Technology devices ideal for high-amperage applications in entertainment, mining, construction, offshore oil rigs, ship-to-shore power, utilities, load-testing equipment, portable generators and more.

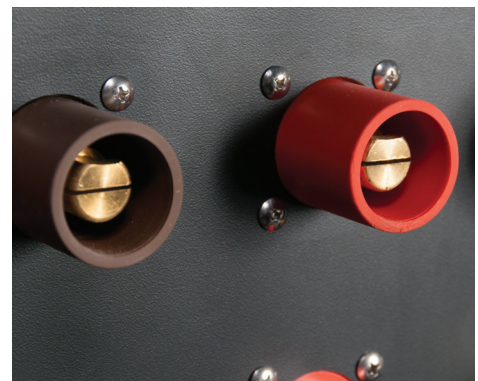
Today, Maringo offers a broad range of CAM devices to meet the needs of these markets and applications.

Making the Best even Better, Improved Inline CAMs

Our inline CAMs are the best in the industry, but we're always looking for ways to make our devices work better for you. We personally visited a number of our customers to see our inline cams in action and received input on what we could improve.

As a result, we updated our CAMs to use a smoother body design that eliminates sharp edges that can get caught during use. This design also provides a perfectly contoured ergonomic grip to give you maximum control during mating and removal. Highly visible alignment arrows guide quicker alignment during mating.

Add these improvements to the fact that we've added a wider screw driver slot, wider cut lines and offset internal steps you'll see that our inline CAMs are now better than ever.





Inline Connectors	45
Panel Mounts	47
Cam Reducers	50
CL/CLS/CLM Adapters	51
CL/CLS/CLM Covers & Caps	52
Tools, Parts & Accessories	54
Dimension Drawings	55

Portable generators and power distribution panels are a common application for Cam Technology single pole CAM devices.

CAM Technology Inline Connectors



Wider Cut Lines

Wider indicator lines allow for easier cuts
Offset internal step provides a clean
and tight sealing surface

Retention Screw

Nonconductive glass filled
nylon screw
Wider screwdriver slot
allows easier assembly

Alignment Arrow

Makes mating quick
and easy

Smooth Design

Eliminates sharp edges
that get caught during use

Ergonomic Grip

Contour shape is ergonomic and
gives user maximum control

Improved Contact

Solid brass contact has optimized
chamfers on both ends for easier
installation



Features & Benefits

CLS Series and CLM Series inline connectors have a non-conductive retaining screw which passes through the brass contact and fastens at both ends to the retaining ring, providing maximum resistance to excessive torque loading. Constructed of solid weatherproof materials, all CLS and CLM products are UL listed, CSA listed, NEMA type 3R and NEMA 4 rated for wet locations.

All CL, CLS and CLM Series products mate precisely with all other manufacturers' cam products.

CL panel mount devices are constructed of super tough nylon housing which will not chip or crack under extreme temperatures and impact conditions. The unique mounting system permits the use of self tapping stainless screws. No lock washers or nuts required for assembly.



CAM Technology Inline Connectors



CLS Series 16 Inline

- NEMA type 3R/4
- Santoprene boot
- 400A 600V
- Accepts #6-4/0 wire

Wire Connection	M/F	Item #
#6-#2 AWG	Male	CLS2MB
	Female	CLS2FB
#6-#2 AWG brass contact with hardware	Male	CLS2MCONT
	Female	CLS2FCONT
#2-2/0 AWG	Male	CLS20MB
	Female	CLS20FB
#2-2/0 AWG brass contact with hardware	Male	CLS20MCONT
	Female	CLS20FCONT
2/0-4/0 AWG	Male	CLS40MB
	Female	CLS40FB
2/0-4/0 AWG brass contact with hardware	Male	CLS40MCONT
	Female	CLS40FCONT
Boot with retaining screw	Male	CLSMBOOT
	Female	CLSFBOOT

A B C D E F G H

Retaining Screw (25 pack) 203279.1



CLM Mini Series 15 Inline

- NEMA type 3R/4
- Santoprene boot
- 150A 600V
- Accepts #8-#2 wire

Wire Connection	M/F	Part #
#8-#2 AWG	Male	CLM2M
	Female	CLM2F

A B C D E F G H



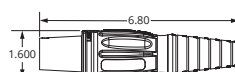
CLS Series 18 Inline Ballnose

- NEMA type 3R/4
- Santoprene boot
- 400A 600V
- Accepts #6-4/0 wire

Wire Connection	M/F	Item #
#6-#2 AWG	Male	CLS182MB
	Female	CLS182FB
#6-#2 AWG brass contact with hardware	Male	CLS182MCONT
	Female	CLS182FCONT
#2-2/0 AWG	Male	CLS1820MB
	Female	CLS1820FB
#2-2/0 AWG brass contact with hardware	Male	CLS1820MCONT
	Female	CLS1820FCONT
2/0-4/0 AWG	Male	CLS1840MB
	Female	CLS1840FB
2/0-4/0 AWG brass contact with hardware	Male	CLS1840MCONT
	Female	CLS1840FCONT
Boot with retaining screw	Male	CLS18MBOOT
	Female	CLS18FBOOT

A B C D E

Retaining Screw (25 pack) 203279.1



Dimensional drawings
on page 55

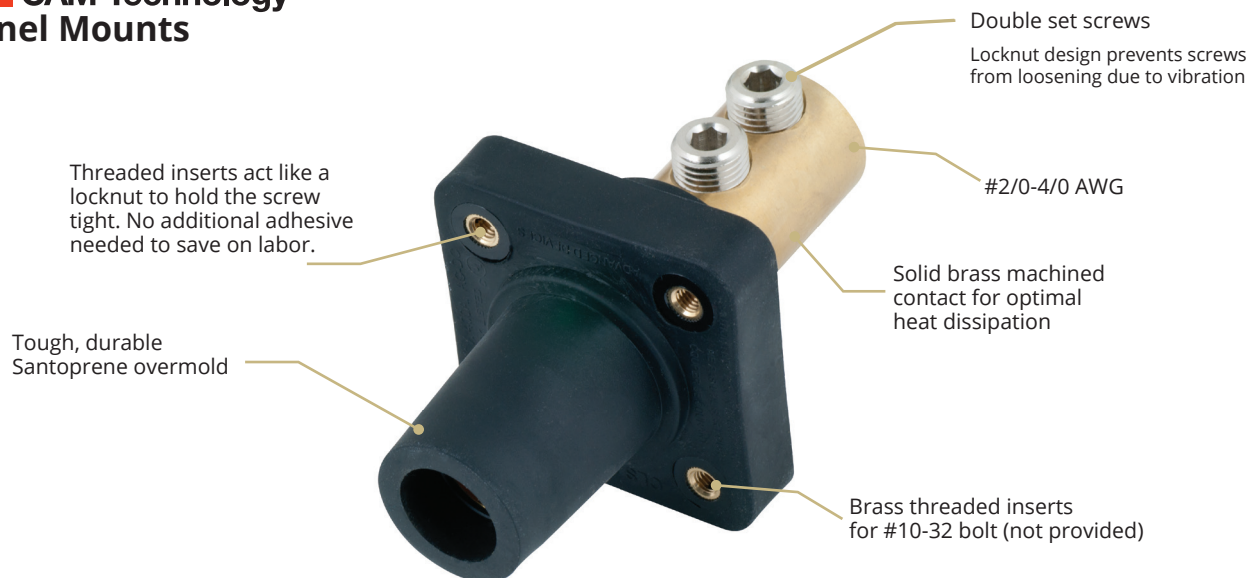
**WHEN
YOU
ORDER**

Part # + Color Letter (A B C D E F G H) + .OEM = Ordering Number

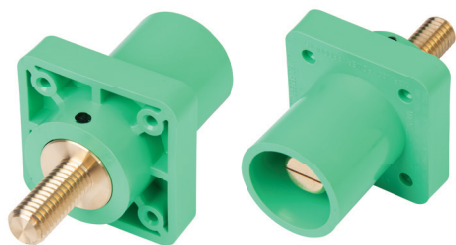
Examples: CLS40MB + **E** + .OEM = CLS40MB-E.OEM

CLM2F + **H** = CLM2F-H

CAM Technology Panel Mounts



Note: Panel mounts, mounting holes, and wiring connections are fully interchangeable with all competitive parts.



CL Panel Mounts

- Super Tough Nylon
- 400A 600V
- Comes with qty (4) of #8 Plastite Self Threading Screw for Mounting Flange
- Optional drilled out version (X) for #10-32 nut and bolt

Wire Connection	M/F	Part #
#2-2/0 AWG double set screw	Male	CL20MRB
	Female	CL20FRB
2/0-4/0 AWG double set screw	Male	CL40MRB
	Female	CL40FRB
One hole bus bar 5/16"-18 thread	Male	CL40MRB-BB*
	Female	CL40FRB-BB*
1/2"-13 UNC threaded stud 1-1/8" long	Male	CL40MRSB
	Female	CL40FRSB
1/2"-13 UNC threaded stud 2" long	Male	CL40MRSB2
	Female	CL40FRSB2
1/2"-13 UNC threaded stud with extended shoulder 1-1/8" long	Male	CL40MRSBML
	Female	CL40FRSBML

*brass threaded insert for #10-32 bolt (not included)

A B C D E F G H

CLS Panel Mounts

- Santoprene
- 400A 600V
- Brass threaded inserts for #10-32 bolt (Not provided)
- Optional drilled out version (X) for #10-32 nut and bolt

Wire Connection	M/F	Part #
2/0-4/0 AWG double set screw	Male	CLS40MRB
	Female	CLS40FRB
One hole bus bar 5/16"-18 thread	Male	CLS40MRB-BB
	Female	CLS40FRB-BB
Two hole bus bar 5/16"-18 thread	Male	CLS40MRB-BB2
	Female	CLS40FRB-BB2
1/2"-13 UNC threaded stud 1-1/8" long	Male	CLS40MRSB
	Female	CLS40FRSB
1/2"-13 UNC threaded stud 1-1/2" long	Male	CLS40MRSB1.5
	Female	CLS40FRSB1.5
1/2"-13 UNC threaded stud 2" long	Male	CLS40MRSB2
	Female	CLS40FRSB2

A B C D E F G H

**WHEN
YOU
ORDER**

Part # + Color Letter (**A B C D E F G H) + Drill Out (X) = Ordering Number**

Examples: **CLS40MRSB + E + X (drill out) = CLS40MRSB-EX**

CAM Technology Panel Mounts



Note: Panel mounts, mounting holes, and wiring connections are fully interchangeable with all competitive parts.



CLM Mini Panel Mounts

- Super Tough Nylon
- 150A 600V
- Comes with qty (3) #8 Self Tapping Screws for Mounting Flange
- Optional drilled out version (X) for #10-32 nut and bolt

Wire Connection	M/F	Part #
#8-#2 AWG double set screw	Male	CLMMR2
	Female	CLMFR2
5/16"-18 UNC threaded stud 3/4" long	Male	CLMMRS
	Female	CLMFRS

A B C D E F G H



CLSM Mini Panel Mounts

- Santoprene
- 150A 600V
- Drilled out for #10-32 nut and bolt (Not provided)

Wire Connection	M/F	Part #
#8-#2 AWG double set screw	Male	CLSMMR2
	Female	CLSMFR2

A B C D E

Wire Connection	M/F	Part #
5/16"-18 UNC threaded stud 3/4" long	Male	CLSMMRS
	Female	CLSMFRS

A B C D E F G H

**WHEN
YOU
ORDER**

Part # + Color Letter (**A B C D E F G H) = Ordering Number**

Examples: CLMMRS + **-E** = CLMMRS-E

CAM Technology Panel Mounts

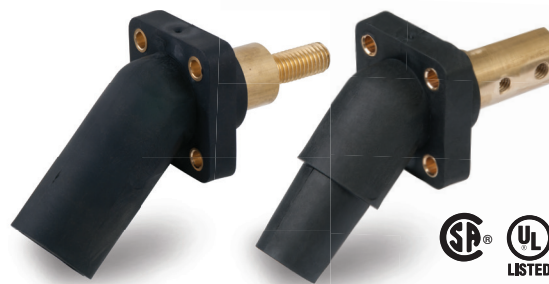


CLS Series 18 Ballnose Panel Mounts

- Santoprene overmold
- 400A 600V AC/DC ratings
- Brass threaded inserts for #10-32 bolt (not provided)
- Available in 2/0-4/0 AWG wire range
- Double set screw and 1-1/8" threaded stud configurations

Wire Connection	M/F	Part #
2/0-4/0 double set screw	Male	CLS1840MRB
	Female	CLS1840FRB
1/2"-13 UNC threaded stud 1-1/8" long	Male	CLS1840MRSB
	Female	CLS1840FRSB

A B C D E

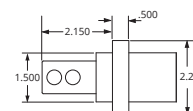


CLS 45 Degree Panel Mounts

- Santoprene
- 400A 600V
- One piece brass contact
- Brass eyelets for #10-32 through bolt (Not provided)

Wire Connection	M/F	Part #
1/2"-13 UNC threaded stud 1-1/8" long	Male	CLS45MRSB
	Female	CLS45FRSB
2/0-4/0 AWG double set screw	Male	CLS45MRB
	Female	CLS45FRB
1/2"-13 UNC threaded stud 2" long	Male	CLS45MR2SB
	Female	CLS45FR2SB
One hole bus bar 5/16"-18 thread	Male	CLS45MRB-BB
	Female	CLS45FRB-BB
Two hole bus bar 5/16"-18 thread	Male	CLS45MRB-BB2
	Female	CLS45FRB-BB2

A B C D E F G H



Dimensional drawings
on pages 55-56

**WHEN
YOU
ORDER**

Part # + Color Letter (**A B C D E F G H) + Drill Out (X) = Ordering Number**

Examples: **CLS45MRSB + E = CLS45MRSB-E**

CAM Technology

Cam Reducers



Male-Male Coupler

- 150A / 600V
- Male-Male

CLMMM

A B C D E



Female-Female Coupler

- 150A / 600V
- Female-Female

CLMFF

A B C D E



Male-Male-Female T

- 150A / 600V
- Male-Male-Female

CLMPT

A B C D E



Male-Female-Female T

- 150A / 600V
- Male-Female-Female

CLMTT

A B C D E



400A Female-150A Female Cam Reducer

- 400A / 600V
- Female-Female

CLMADFF

A B C D E



400A Male-150A Female Cam Reducer

- 400A / 600V
- Male-Female

CLMADMF

A B C D E



400A Female-150A Male Cam Reducer

- 400A / 600V
- Female-Male

CLMADFM

A B C D E



400A Male-150A Male Cam Reducer

- 400A / 600V
- Male-Male

CLMADMM

A B C D E



3Fer 400A Male to Three 150A Females

- 400A / 600V
- Male-Female-Female-Female

CLMAD3F

A B C D E



3Fer 400A Male to Three 150A Female

- 400A / 600V
- Male-Female-Female-Female

CLMAD3FST

A B C D E

WHEN
YOU
ORDER

Part # + Color Letter (A B C D E) = Ordering Number

Examples: CLMMM + -E = CLMMM-E

CLMTT + -B = CLMTT-B

CAM Technology CL/CLS/CLM Adapters



Reverse 3Fer

- 400A / 600V
- Female-Male-Male-Male

CA3M

B E



3Fer

- 400A / 600V
- Male-Female-Female-Female

CA3F

A B C D E



Male-Male Coupler

- 400A / 600V
- Male-Male

CDMM

A B C D E F G H



Female-Female Coupler

- 400A / 600V
- Female-Female

CDFF

A B C D E F G H



Paralleling T

- 400A / 600V
- Male-Male-Female

CPT

A B C D E



Tapping T

- 400A / 600V
- Male-Female-Female

CTT

A B C D E



Ballnose 3Fer

- 400A / 600V
- Male-Female-Female-Female

CA318F

A B C D E



Ballnose Tapping T

- 400A / 600V
- Male-Female-Female

CD18TT

A B C D E



Ballnose Male and Tapernose Female

- 400A / 600V
- Male-Female

CD1816MF

A B C D E



Male Angle Panel Mount

- 400A / 600V

CL40MR-ANGLE

CL40MR-OFFSET

A B C D E F G H



Female Angle Panel Mount

- 400A / 600V

CL40FR-ANGLE

CL40FR-OFFSET

A B C D E F G H



Paralleling T

- 400A / 600V
- Male-Male-Female
- 18" cable length

CPTFST

B E



Tapping T

- 400A / 600V
- Male-Female-Female
- 18" cable length

CTTFST

A B C D E



Tapping T

- 400A / 600V
- Male-Female-Male
- 18" cable length

CTTMST

A B E



3Fer Cam

- 400A / 600V
- Male-Female-Female-Female
- 18" cable length

CA3FST

A B C D E



Reverse 3Fer

- 400A / 600V
- Female-Male-Male-Male
- 18" cable length

CA3MST

E

WHEN
YOU
ORDER

Part # + Color Letter (A B C D E F G H) = Ordering Number

Examples: CA3F + -E = CA3F-E



CAM Technology

CL/CLS/CLM Protective Covers & Caps

Manufactured in UV-resistant polycarbonate, all snap back plastic covers are made with stainless steel offset, spring and pin. Designed for surface mount, the new snap back plastic covers are fully gasketed and NEMA 3R rated for weathertight protection.

Manufactured in UV-resistant polycarbonate

Now available in clear to visibly see all colors of the CAM Panel Mounts

Stainless steel offset, spring and pin

Fully gasketed snap back covers for weather tight protection



Now available in Clear

Z



Now available in Clear

Z

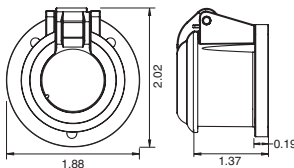


Series 15 Mini CAM Cover

- For 150 amp panel mounts
- NEMA 3R
- All Plastic Construction
- Comes with gasket pre-applied

CLM3R

A B C D E F G H Z

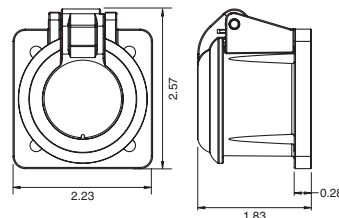


Series 16 & 18 CAM Cover

- For 400 amp panel mounts
- NEMA 3R
- All Plastic Construction
- Comes with gasket pre-applied

CLL3RN

A B C D E F G H Z



Series 16 Santoprene Caps

- Protective cap with lanyard

CL40FC fits female
CL40MC fits male
CLMFC mini—fits female
CLMMC mini—fits male

A B C D E F G H

WHEN
YOU
ORDER

Part # + Color Letter (A B C D E F G H Z) = Ordering Number

Examples: CLM3R + -E = CLM3R-E CLL3RN + -H = CLL3RN-H



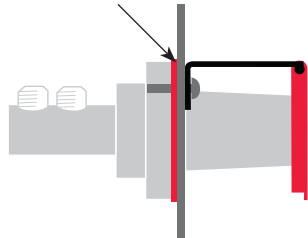
Series 16 Through Mount Cover

- For 400 amp panel mounts
- NEMA 1
- Metal Standoff with Plastic Lid
- For use with through mounted Panel Mounts
- Snap back cover

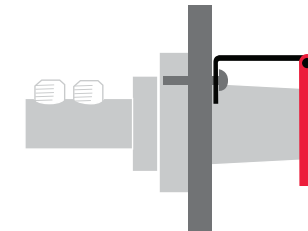
CL40WTC-S-062 0.370"-.400" panel thickness
CL40WTC-L-187 0.070"-.090" panel thickness

A B C D E F G H

closed-cell foam
mounting gasket



THROUGH-MOUNT
PANEL .070-.090"
CL40WTC-L-187



THROUGH-MOUNT
PANEL .379-.400"
CL40WTC-S-062



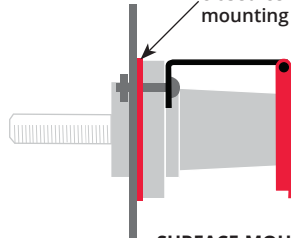
Series 16 Surface Mount Cover

- For 400 amp panel mounts
- NEMA 1
- Metal Standoff with Plastic Lid
- For use with surface mounted Panel Mounts
- Snap back cover

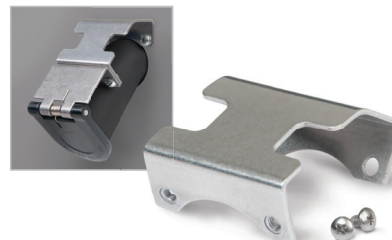
CL40WTC-L-062
CL40WTC-L-125

A B C D E F G H

closed-cell foam
mounting gasket



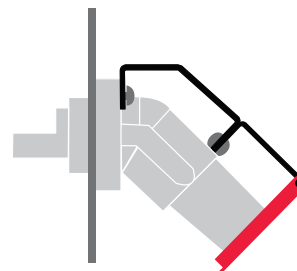
SURFACE-MOUNT
CL40WTC-L-125



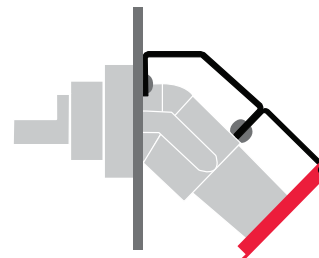
45 Degree CAM Adapter Plate

- Use adapter plate with through-mount cover on 45 degree panel mounts
- Stainless steel plate
- Stainless steel hardware included

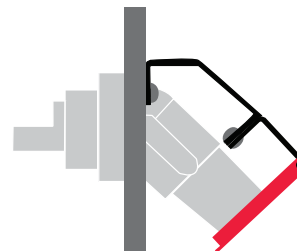
203445



SURFACE-MOUNT
CL40WTC-L-125



THROUGH-MOUNT
PANEL .070-.090"
CL40WTC-L-187



THROUGH-MOUNT
PANEL .379-.400"
CL40WTC-S-062

WHEN
YOU
ORDER

Part # + Color Letter (**A B C D E F G H Z**) = Ordering Number

Examples: CLWTC-L-187 + **-E** = CLWTC-L-187-E

CAM Technology Tools, Parts & Accessories



Com-A-Long Tool

CLSPRESS



Connector Extractors

15CLM	150A Male
15CLF	150A Female
16CLM	400A Male
16CLF	400A Female



CLS Female Reforming Tool 400A

- CLS reforming tool restores damaged female cam-type contacts

500072



Wire Shoe

- 100A stage pins (#2 AWG)
- 60A Stage pins (#6 AWG)
- 0.70" (18 mm)

430130.1	Qty 30	#2 AWG
430129.1	Qty 60	#6 AWG



Wire Shoe

- Available in standard pack only
- CLM/CLSM mini panel mounts, 1" (25 mm)

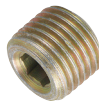
430131.1	Qty 25	#2 AWG
----------	--------	--------



20A Stage Pin Wire Shoe

- Available in standard pack only

430117.1	Qty 300	#12 AWG
----------	---------	---------



Set Screw

- Available in standard pack only

500017PLT.1	Qty 50	for CLS Inline
430171.1	Qty 50	for CLM 15 Series Inline
430112.1	Qty 300	for 20A Bates
430120.1	Qty 100	for 60A Bates/G5 Inline
430121.1	Qty 100	for 100A Bates/G5 Inline



Set Screw for #6 Wire

- Available in standard pack only
- Group 5 and Bates 100A
- CLM/CLSM mini panel mounts

430126.1	Qty 60
----------	--------



Retaining Screw

- Replacement screw made of Super Tough Nylon
- Available in standard pack only

203279.1	Qty 25	CLS
520730.1	Qty 25	CLM



CL/CLS Copper Shim

- Available in standard pack only

430244.1	Qty 25
----------	--------

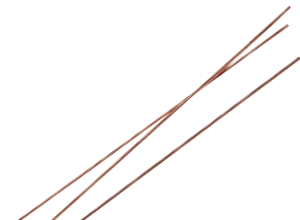


No image
available

Wire Twist Tool **NEW**

- Use with power screwdriver to speed CAM assembly.

CLSWIRETOOL



Strain Relief Wire

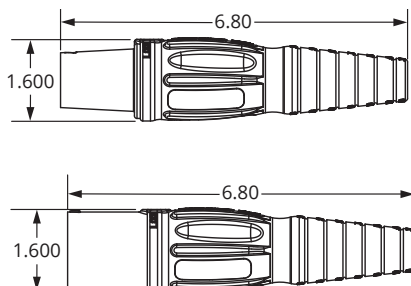
- Available in standard pack only

430245.1	Qty 100	CLS
430246.1	Qty 100	CLM

Dimensions

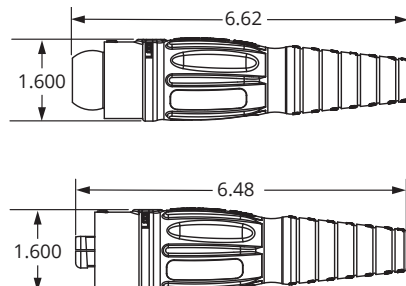
CLS Series 16 Inlines

CLS2MB, CLS2FB, CLS2MCONT, CLS2FCONT,
CLS20MB, CLS20FB, CLS20MCONT, CLS20FCONT,
CLS40MB, CLS40FB, CLS40MCONT, CLS40FCONT,
CLSMBOOT, CLSFBOOT



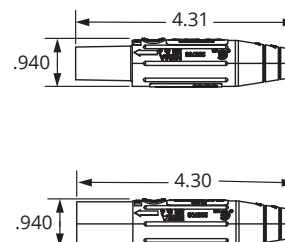
CLS Series 18 Inlines

CLS182MB, CLS182FB, CLS2MCONT,
CLS182FCONT, CLS1820MB, CLS1820FCONT,
CLS1840MB, CLS1840FB, CLS40MCONT,
CLS1840FCONT, CLS18MBOOT, CLS18FBOOT



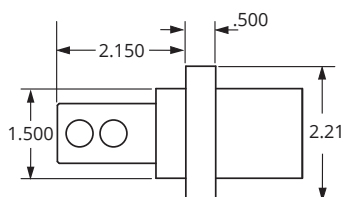
CLM Mini Series 15 Inlines

CLM2M, CLM2F

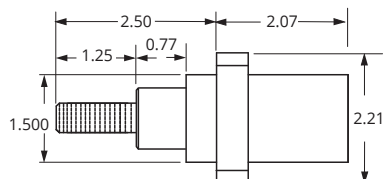


CL Panel Mounts

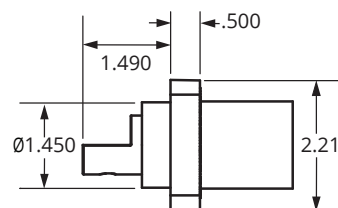
CL40MRB, CL40FRB,
CL20MRB, CL20FRB,
CLS40MRB, CLS40FRB



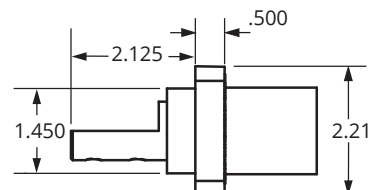
CL40MRSBML, CL40FRSBML



CL40MRB-BB, CL40FRB-BB,
CLS40MRB-BB, CLS40FRB-BB

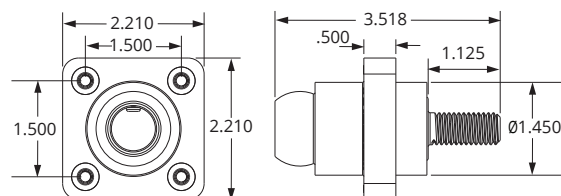
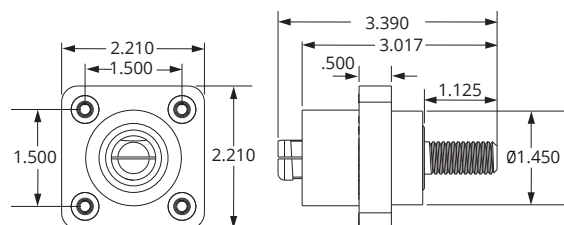
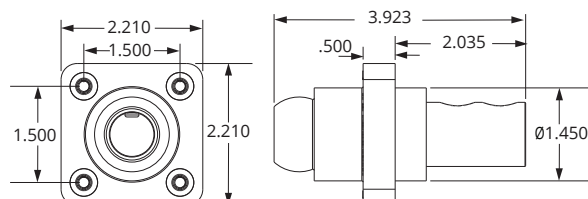
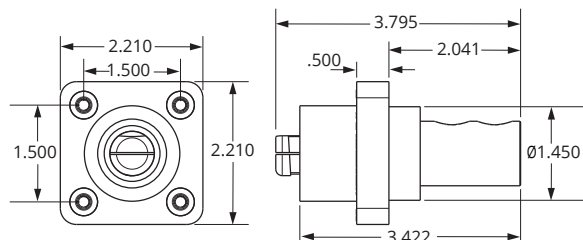


CLS40MRB-BB2, CLS40FRB-BB2



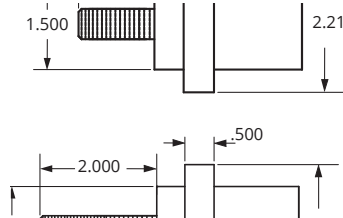
CLS 18 Series Panel Mounts

CLS1840MRB, CLS1840FRB, CLS1840MRB, CLS1840FRB

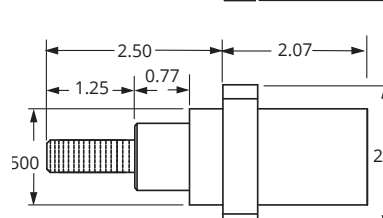


CLS Panel Mounts

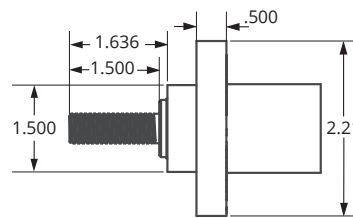
CL40MRSB, CL40FRSB,
CLS40MRSB, CLS40FRSB



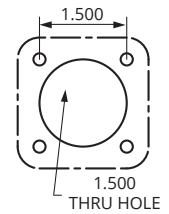
CL40MRSB2, CL40FRSB2



CL40MRSB1.5, CL40FRSB1.5

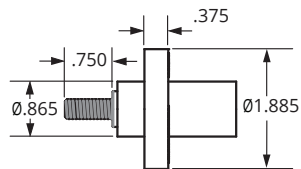


CL, CLS Panel Mount
Family Cut-out

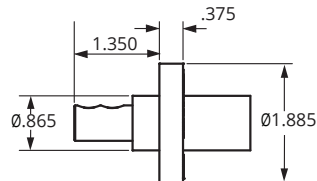


CLM Mini Panel Mounts

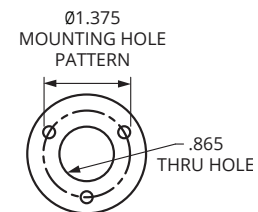
CLMMRS, CLMFRS, CLSMMRS, CLSMFRS



CLMMR2, CLMFR2, CLSMFR2

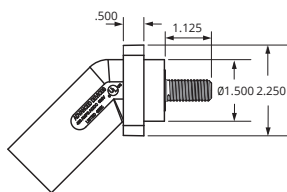


CLM Panel Mount Family Cut-out

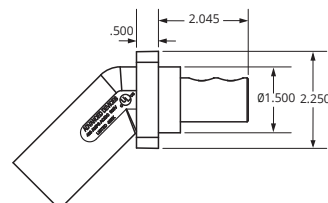


CLS 45 Degree Panel Mounts

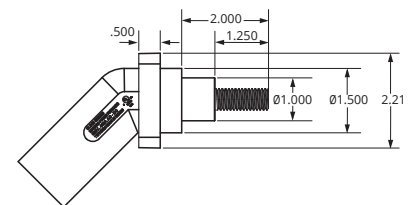
CLS45MRSB, CLS45FRSB



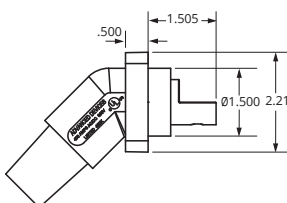
CLS45MRB, CLS45FRB



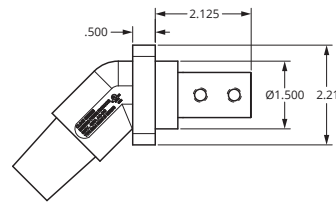
CLS45MR2SB, CLS45FR2SB



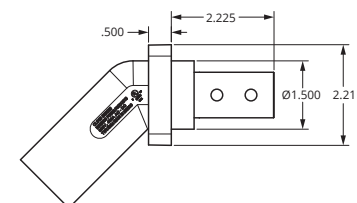
CLS45MRB-BB, CLS45FRB-BB



CLS45FRB-BB2



CLS45MRB-BB2



STAGE PIN DEVICES

bates® GROUP 5®

For 30 years bates stage pins have been the industry standard for stage lighting devices. Our Bates connectors are manufactured from an extreme temperature tolerant thermoplastic. This performs in extreme temperatures and is highly durable and resilient to punishing impacts. Bates stage pin connectors offer years of reliable service in the most demanding environments. Our pins are crafted from solid brass rod machined to ± 0.0005 " tolerance while allowing the pins to float which allows positive alignment and pin contact, which is critical to device life. Precision slotted and crimped female contacts are sized to provide constant spring contact pressure even when the pins are damaged. The 2 piece strain relief accommodates a wide range of wire sizes. All 20A bates stage pin inlines are available with clear or colored tops while the stage pin panel mounts can be ordered in specific colors. 100A 250V stage pins are available in yellow to denote the unique voltage rating.

Our Group 5 products continue to be precision machined from high temperature phenolic material. Our phenolic is the highest quality available today. Group 5 products have all the same features as our Bates connectors while offering a traditional material.

The Maringo 20 Amp Power Connectors. Ideal for use with LED lighting and other loads such as multi-bank video monitors, these connectors are interchangeable with other brands. Both inline (female) and panel mounted (male) versions are available. The product is also color coded for input (blue) and output (gray) to ease in proper wiring connection. Additional gasketing provides an IP44 degree of dust and moisture protection.





Bates Inlines	59
Bates Panel Mounts	60
Group 5 Inlines	61
Group 5® Panel Mounts & Wire Charts	62
Stage Pin & Panel Mount Dimensions	63
Entertainment Adapters	65
20A Power Connectors	66

Bates and Group 5 stage pin devices are the brands of choice
in the stage lighting and entertainment industry.

bates® Inlines



20A 125V Stage Pins

- Thermoplastic housing
- Accepts #16/3 SJO to #12/3 SO cable

Wire Connection	M/F	Part #
Set screw	Male	20M
	Female	20F
All white (cover and body)	Male	20M-AW
	Female	20F-AW
Ring terminal	Male	20M-RT
	Female	20F-RT
Clear cover	Male	20M-X
	Female	20F-X

A B C D E G H X



60A 125V Stage Pins

- Thermoplastic housing
- #6 Type SC single conductor cable
- Or #6/3 or #8/3 Type W multiconductor cable

Wire Connection	M/F	Part #
Set screw	Male	60M
	Female	60F



100A 125V Stage Pins

- Thermoplastic housing
- Use #2 or #4 Type SC single conductor cable
- Or use #4/3 or #6/3 Type W multiconductor cable

Wire Connection	M/F	Part #
Set screw	Male	100M
	Female	100F



100A 250V Stage Pins

- Thermoplastic housing
- Use #2 or #4 Type SC single conductor cable
- Or use #4/3 or #6/3 Type W multiconductor cable
- Yellow only to denote 250V

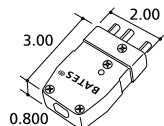
Wire Connection	M/F	Part #
Set screw	Male	106M-H
	Female	106F-H



TRIXFER™ 20A Stage Pin Jumper Tap

The Bates "Trixfer" stage pin jumper tap replaces cumbersome twofers, delivering grounded 20A power to multiple devices with faster, cleaner, simpler setup.

TRIXFER Male-Female combo
TRIXFER.FF Female-Female combo



Dimensional drawings
on page 63

Related Products



Wire Shoes
page 54



Set Screws
page 54

OEM Available: Add suffix ".OEM" to the Part number for bulk packaging.
 Quantities vary. See your sales rep for quantity details.

bates® Panel Mounts



20A 125V Stage Pin Panel Mount

- Thermoplastic body
- Accepts #10 or #12 AWG

Wire Connection	M/F	Part #
Set screw	Male	20MR
	Female	20FR
Ring terminal	Female	20FR-RT

A B C D E F G H



60A 125V Stage Pin Panel Mount

- Thermoplastic body
- Accepts #6 or #8 AWG

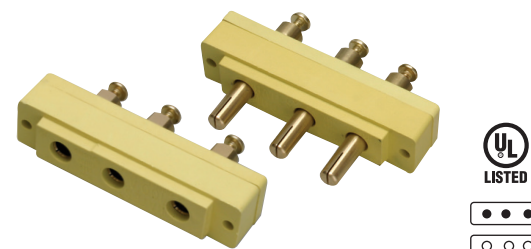
Wire Connection	M/F	Part #
Ring terminal	Male	60MR
	Female	60FR
Double set screw	Male	60MR-DSS
	Female	60FR-DSS



100A 125V Stage Pin Panel Mount

- Thermoplastic body
- Accepts #2 or #4 AWG
- Black only to denote 125V

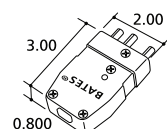
Wire Connection	M/F	Part #
Ring terminal	Male	100MR
	Female	100FR
Double set screw	Male	100MR-DSS
	Female	100FR-DSS



100A 250V Stage Pin Panel Mount

- Thermoplastic body
- Accepts #2 or #4 AWG
- Yellow only to denote 250V

Wire Connection	M/F	Part #
Ring terminal	Male	106MR-H
	Female	106FR-H
Double set screw	Male	106MR-DSS-H
	Female	106FR-DSS-H



Dimensional drawings
on page 63

Related Products



Wire Shoes
page 54



Set Screws
page 54

OEM Available: Add suffix ".OEM" to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

GROUP 5® Inlines



20A 125V Stage Pins

- Made from Phenolic
- Accepts #10 or #12 S Type Cable

Wire Connection	M/F	Part #
Set screw	Male	G20M
	Female	G20F
Internal fuse	Female	G20F-FU



60A 125V Stage Pins

- Made from Phenolic
- #6 Type SC single conductor cable
- Or #6/3 or #8/3 Type W multiconductor cable

Wire Connection	M/F	Part #
Set screw	Male	G60M
	Female	G60F
Internal fuse	Female	G60F-FU
Two cable inlet (2FER)	Male	G60M-DB



100A 125V Stage Pins

- Made from Phenolic
- Use #2 or #4 Type SC single conductor cable
- Or use #4/3 or #6/3 Type W multiconductor cable
- Black only to denote 125V

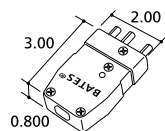
Wire Connection	M/F	Part #
Set screw	Male	G100M
	Female	G100F
Internal fuse	Male	G100M-FU
	Female	G100F-FU
Two cable inlet (2FER)	Male	G100M-DB



100A 250V Stage Pins

- Made from Phenolic
- Use #2 or #4 Type SC single conductor cable
- Or use #4/3 or #6/3 Type W multiconductor cable
- Yellow only to denote 250V

Wire Connection	M/F	Part #
Set screw	Male	G106M-H
	Female	G106F-H
Two cable inlet (2FER)	Male	G106M-DB-H



Dimensional drawings
on page 63

Related Products



Wire Shoes
page 54



Set Screws
page 54

OEM Available: Add suffix “.OEM” to the Part number for bulk packaging.
Quantities vary. See your sales rep for quantity details.

GROUP 5® Group 5 Panel Mounts



100A 125V Stage Pin Panel Mount

- Made from Phenolic
- 100A 125V
- Accepts #2 or #4 AWG

M/F	Part #
Male	G100MR1-R5
Female	G100FR1-R5

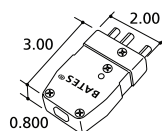
Related Products



Wire Shoes
page 54



Set Screws
page 54



Dimensional drawings
on page 63

Wire Charts

How much Amperage can a wire safely conduct?

The National Electrical Code publishes the following table showing how much amperage each size cable can carry:

AWG Wire Size	AWG cm Area	Ohms/1000 ft	2 Current Carrying Conductors	3 Current Carrying Conductors
18	1,600	6.385	10	7
16	2,600	4.016	13	10
14	4,100	2.525	18	15
12	6,500	1.588	25	20
10	10,500	.9989	30	25
8	16,800	.6282	40	35
6	26,600	.3951	55	45
4	42,000	.2485	70	60
2	66,500	.1563	95	80

Ohms/1000 ft. can be used to calculate any voltage drop. The formula is: Voltage (drop in volts) = [1 (amperage) x circuit length in feet/1000 x Ohms/1000 ft.]

Wire Specifications

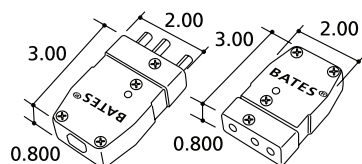
Diameter Ranges of Jacketed Cord in Accordance with Standard UL 62

AWG	2 Cond.	3 Cond.	4 Cond.	5 Cond.
Type* SV, SVO, SVT, SVTO				
18	.220-.255"	.230-.265"		
Type* SJ, SJO, SJT, SJTO				
18	.280-.315"	.300-.335"	.325-.365"	
16	.305-.340"	.325-.360"	.350-.395"	
14	.335-.375"	.360-.395"	.390-.435"	
12	.405-.455"	.425-.475"	.465-.520"	
10	.540-.605"	.565-.635"	.625-.700"	
Type* S, SO, ST, STO				
18	.340-.385"	.360-.400"	.385-.430"	.460-.510"
16	.365-.410"	.385-.430"	.410-.460"	.490-.550"
14	.495-.550"	.520-.575"	.560-.620"	.630-.705"
12	.565-.625"	.590-.655"	.640-.710"	.700-.770"
10	.615-.685"	.650-.720"	.700-.775"	.760-.840"
8	.780-.880"	.830-.930"	.925-1.050"	1.000-1.150"
6	.920-1.050"	.970-1.100"	1.050-1.200"	1.180-1.330"
4	1.060-1.210"	1.130-1.280"	1.250-1.450"	
2	1.210-1.400"	1.300-1.500"	1.450-1.650"	

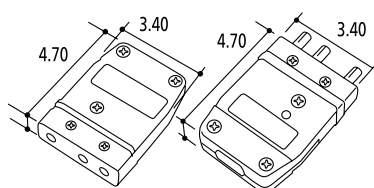
Stage Pin & Panel Mount Dimensions

bates®

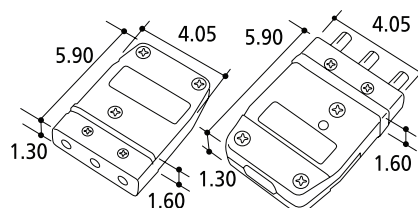
20A 125V Stage Pins



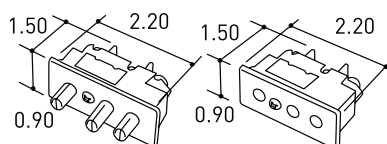
60A 125V Stage Pins



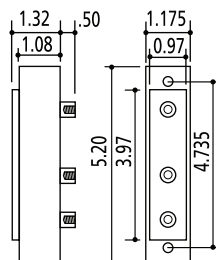
100A 125/250V Stage Pins



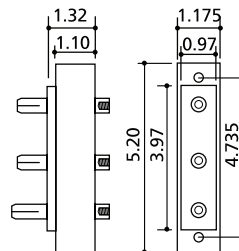
20A 125V Panel Mounts



60A 125V Panel Mounts

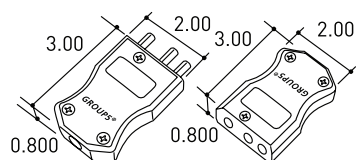


100A 250V Panel Mounts

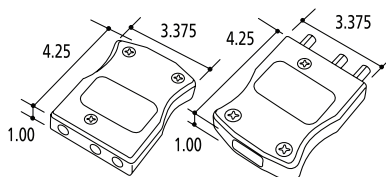


GROUP 5®

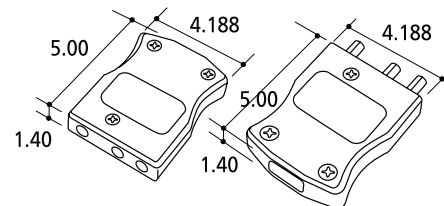
20A 125V Stage Pins



60A 125V Stage Pins



100A 125/250V Stage Pins



Entertainment Adapters

Marinco introduces entertainment adapters in a variety of configurations. These versatile adapters are made out of rugged phenolic to be able to withstand high temperatures and are a compact solution over pigtail adapters. The wiring devices integral to the adapters are the same high-quality heavy duty products used in the entertainment industry for years, ensuring for years of use in demanding applications.



P15-SP20



P15-PC20



SP20-PC20



SP20-C1520

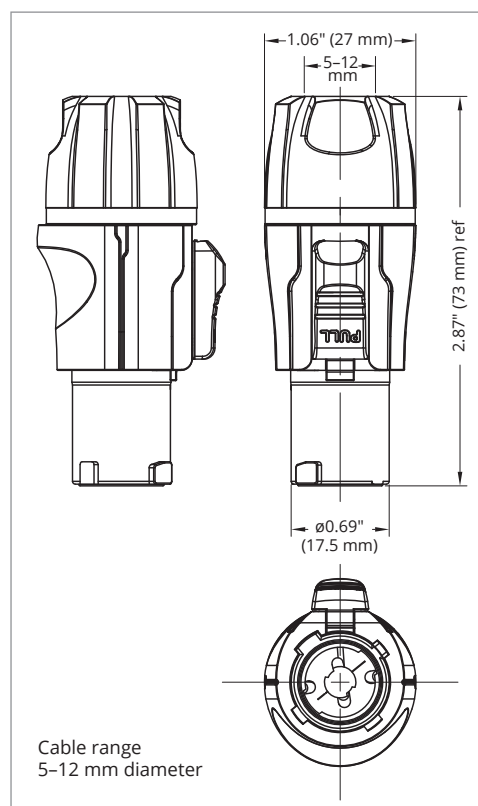
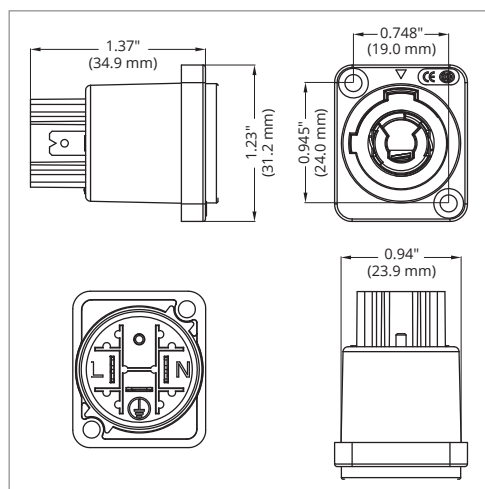
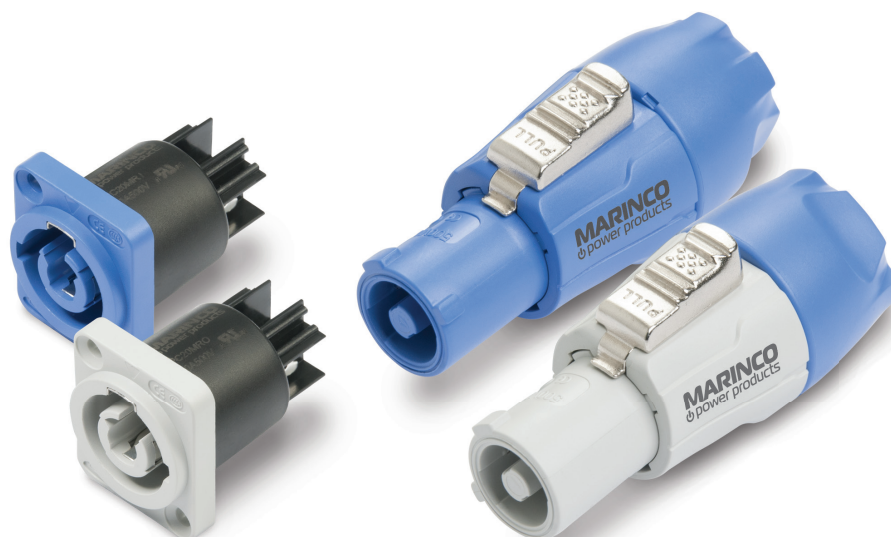
Part #	Description
P15-SP20	15A Edison plug to 20A female stage pin adapter
P15-PC20	15A Edison plug to 20A Powercon receptacle adapter
SP20-C1520	20A Male Inline stage pin to 20A Edison connector adapter
SP20-PC20	20A Male inline stage pin to 20A Powercon receptacle adapter

20A Power Connectors

The Marincos 20 Amp Power Connectors are ideal for use with LED lighting and other loads such as multi-bank video monitors, these connectors are interchangeable with other brands. Both inline (female) and panel mounted (male) versions are available. The product is also color coded for input (blue) and output (gray) to ease in proper wiring connection. Additional gasketing provides an IP44 degree of dust and moisture protection.

- Rated 20A 500V AC/DC
- Color coded for input and output
- Rugged, easy-to-use locking design
- UL, cUL recognized component file # E479888
- CE approved
- IP44 rating
- 12-14 AWG cable range
- Copper contacts with gold and silver plating

Part #	Description
PC20FCI	20A 500V Female Connector Input, Blue
PC20FCO	20A 500V Female Connector Output, Gray
PC20MRI	20A 500V Male Panel Mount Input, Blue
PC20MRO	20A 500V Male Panel Mount Output, Gray



BATTERIES & BATTERY MANAGEMENT

Whether it's chargers, batteries, battery management, busbars and fuseholders, our broad offering of products can optimize your charging system.

Battery Chargers

Our battery chargers integrate multiple functions, charging your battery safely and completely even when they are depleted. Fast battery charging is guaranteed by the efficient use of the available grid or generator power.

ChargePro™ Battery Chargers: Digital microprocessor controlled, our ChargePro chargers provide fast, accurate, efficient and full battery charging. They automatically monitor battery power and begin the charge cycle when power is low or every 14 days. **Marinco ChargePro chargers** features include universal input (90-265V AC), IP68 rating, for flooded lead acid, Gel, or AGM batteries. Our new **Guest ChargePro chargers** features 5 stage performance charging, IP67 waterproof rating, and are for flooded lead acid and AGM batteries.

Mastervolt chargers offer an extended range of 12V and 24V chargers up to 100 Amps with the ChargeMaster brand chargers. They're also ideal for virtually all types of batteries including flooded lead acid or gel/AGM/Lithium Ion. **More information can be found in our Mastervolt catalog at mastervolt.us.**

See our Mastervolt and ProMariner product catalogs for more battery charger options.

Batteries

Batteries are the heart and are often the largest single expense in the electrical system. They are sensitive to failure and shortened life if not charged properly. Modern battery chemistries—Gel, AGM, Lithium Ion, and Flooded Lead Acid (FLA)—require adherence to manufacturer's charging recommendations.

All Mastervolt batteries are equipped with shock-proof positive and negative battery plates with rubber separation, while the electrolyte is absorbed in gel or glass fiber. A high-grade lead/calcium compound guarantees you a constant capacity and minimum self-discharging. Mastervolt's batteries are suitable for most any application and include Lithium Ion, Gel, AGM, and traction battery types.

More information can be found in our Mastervolt catalog at mastervolt.us.

Battery Management is central to the safe operation of a vehicle

All vehicles with an engine have at least one battery whose primary purpose is starting the engine and providing power for loads such as lights, pumps, and electronics. The safe switching between batteries, loads, and charge sources is achieved using battery management. Manual Battery Switches are commonly used on vehicles where the batteries are located near the operator, allowing the high amperage switching and the control of the switch to be the same location. On large vehicles, battery switches may be mounted close to the batteries to avoid long cable runs.

We have a partial selection in this catalog, but more information on our BEP brand of battery management products can be found at bepmarine.com





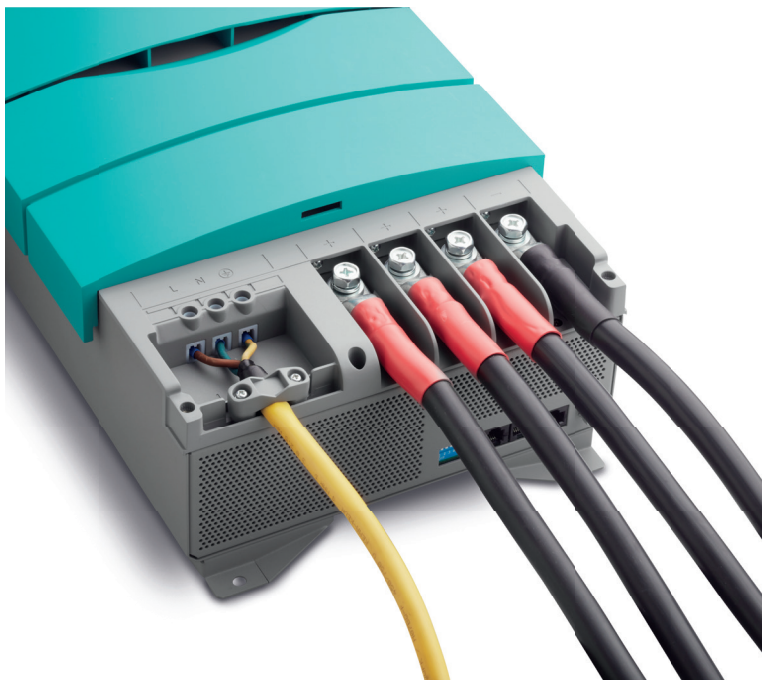
ChargeMaster Plus Chargers	69
Mass Combi® Ultra & Mass Combi Pro Inverter/Chargers	73
Mastervolt® DC-DC Converters	77
Mass Sine Ultra and Mass Sine Inverters	81
CombiMaster® Inverter/Chargers	85
ChargePro™ Battery Chargers	89
Portable Battery Chargers	89
1.5 Amp ChargePro™ Maintainer	90
ChargePro On Board Battery Charger	91
ProTechOne Digital Series Battery Charger & Maintainer	93
Battery Charger Accessories	
Universal AC & Plug Holder	95
Charger DC Cable Extenders	95
Inlets & Charger Cords	97
Battery Switches	98

Guest, Marinco and Mastervolt battery chargers provide an optimum battery charging solution and endure harsh environments for a variety of battery operated industrial equipment.

ChargeMaster Plus Series Battery Chargers:

All-in-one solution for faster and safer charging

ChargeMaster Plus is the next generation battery chargers that integrates multiple functions into one single device. Replacing auxiliary chargers, battery isolators and VSR, ChargeMaster Plus reduces system complexity and cost. Designed for versatility, it charges virtually any combination of three batteries at high speed and works anywhere in the world.



- MasterBus®, CZone and NMEA 2000® communication.
- Multicharger with two outputs, one in/output, DC-DC converter, current limiter and VSR
- Combine Lithium Ion, Gel or AGM, and large or small 12/24V battery banks on a single charger (24V models only)
- Charges multiple batteries while being underway
- Extended Specifications: offers 20% more output at 14.4V and 80% charging power at 140°F (60°C)
- Safe Charge: quickly recognize the State-of-Charge for extended battery life
- Very wide operating range of 80-275V AC, 35-70 Hz
- Compact, easy to connect and quick to install
- Pre-float prevents batteries that are nearly full from overcharging
- All 3 outputs can provide maximum current*

**The total charging current shall not exceed the maximum of the model.*





With the new Battery's best friend architecture, ChargeMaster Plus is capable of charging a multitude of battery chemistries, sizes and voltages. All batteries are charged with the fast and safe 3-step+ charge method.

Other unique features are:

- Revival mode: automatically revives even fully depleted batteries
- Multi voltage: charge 12V starter battery in a 24V system, without additional components (24V models only).
- Priority charge: redirect available power to the lowest battery, for faster charging.
- Smart Input: charge all three batteries from one single alternator for continuous charging on the go.

Global charging



The ChargeMaster Plus handles worldwide AC voltages and frequencies. Resisting large voltage fluctuations and high temperatures, it keeps working in harsh environments. For marine and mobile markets, ChargeMaster Plus is CE, ABYC, UL, SAE, CEC and RCM/C-Tick compliant.

System simplicity



Nowadays, equipment must be self-explaining. The ChargeMaster Plus displays the charge phase of all three outputs in an understandable way. Robust and ergonomic connections save installation time. An integrated VSR eliminates the need for additional components and ensures that the alternators energy is funnelled through to the batteries.

Powerful connections CZone Integration



In modern applications, all electrical components work together. The CAN-based MasterBus enables the ChargeMaster Plus to communicate with displays, shunts and power systems. Models with the addition "CZone integrated" do not only support MasterBus, but also support CZone and NMEA 2000® communication, without the need of additional interfaces. The ChargeMasters Plus series can be configured via MasterBus or will accept a CZone configuration file just like any other CZone device. Other communication standards like ModBus, CANopen, LinBus, etc. are supported via additional interfaces. This wide range of communication interfaces makes the ChargeMaster Plus ideally suited for system integration. All models of the ChargeMaster Plus series can operate as a power supply for delicate communication equipment, or during the construction phase of a boat.

WORKS WITH
CZONE



Integrates with
FATHOM
e-power system

TECH TIP

ChargeMaster Plus simplifies charging systems. Charging faster and safer than ever, this all-in-one charging solution offers best value for money.



ChargeMaster Plus Battery Chargers

Specifications – 12V & 24V

ChargeMaster Plus
12/35-3ChargeMaster Plus
12/50-3ChargeMaster Plus
12/75-3ChargeMaster Plus
12/100-3

Part #	44310305	44310505	44310755	44311005
General Specifications				
Nominal output voltage	12V	12V	12V	12V
Max. charge current per output	35V	50V	75A	100A
Smart In-/Output output voltage	12V	12V	12V	12V
Smart In-/Output output current	n.a.	n.a.	5-40A (adjustable)	5-10A at 12V
Smart In-/Output input current	n.a.	n.a.	max. 40A	max. 40A
Secondary output voltage	n.a.	n.a.	n.a.	n.a.
Secondary output current	n.a.	n.a.	n.a.	n.a.
Max. AC current (230 V / 120 V)	2.4A/4.9A	3.5A/7A	5.6A / 11.8A	7.5A / 14.9A
Total charge current	35A at 14.4V	50A at 14.4V	75A at 14.4V	100A at 14.4V
Number of outputs	3 (max.)	3 (max.)	3 (max.)	3 (max.)
Recommended battery capacity	70-300 Ah	140-400 Ah	320-800 Ah	400-1000 Ah
Nominal input voltage	120/230V (80-275V) 50/60 Hz		120/230V (80-275V) 50/60 Hz	
AC connection	screw terminals	screw terminals	screw terminals	screw terminals
Power supply mode	yes	yes	yes	yes
Display/read-out	LED	LED	LED	LED
Dimensions, hwxwd	11.5" X 8.3" X 4.1" (291 X 210 X 105 mm)		15.1" x 9.8" x 5" (384 x 250 x 127 mm)	
Weight	5.5 lb / 2.5 kg	5.5 lb / 2.5 kg	13 lb / 5.9 kg	13 lb / 5.9 kg
Approvals	CE, ABYC, UL1236, SAE J1171, ISO 8846, CEC, RCM/C-Tick			
Technical Specifications				
Charge characteristic Charge characteristic can be set to your requirements	IUoUo, automatic, 3-step+ for Gel/AGM/ Lithium Ion (LiFePO4)/traction/spiral		IUoUo, automatic / 3-step+ for Gel/AGM/Lithium Ion (LiFePO4)/traction/spiral	
Temperature compensation	-17 mV/°F (-30 mV/°C) temperature sensor included		-17 mV/°F (-30 mV/°C) temperature sensor included	
Voltage compensation	through MasterShunt		through MasterShunt	
DC consumption	< 2 mA (MasterBus® off)		< 2 mA (MasterBus off)	
Current Control function	yes, through MasterBus		yes, through MasterBus	
Power factor	> 0.98	> 0.98	> 0.98	> 0.98
Temperature range (ambient temp.)	-13°F to 176°F, derating > 104°F (-25°C to 80°C, derating > 40°C)		-13°F to 176°F, derating > 104°F (-25°C to 80°C, derating > 40°C)	
Cooling	vario fan	vario fan	vario fan	vario fan
Protection degree	IP23, vertical mounting		IP23, vertical mounting	
Protections	over-temperature, overload, short circuit, high/low battery voltage, ignition protection			
Communication	MasterBus, CZone, NMEA 2000®		MasterBus, CZone, NMEA 2000®	
Charger Status Interface (alarm contact)	yes, using a Multipurpose Contact Output (part # 77030500)		yes, using a Multipurpose Contact Output (part # 77030500)	
Options				
EasyView 5 77010310		option	option	option
Waterproof system monitor with 'daylight readable' color display and intuitive multi- language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.				
MasterShunt 77020115		option	option	option
MasterBus integrated battery monitor, with detailed information on the status of your batteries for a optimized charging process, incl. voltage, current, remaining time and consumption capacity in percentage.				
Mastervolt® USB Interface 77030100		option	option	option
Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when combined with MasterView System software (free to download).				



ChargeMaster Plus
24/20-3
44320205



ChargeMaster Plus
24/30-3
44320305



ChargeMaster Plus
24/40-3
44320405



ChargeMaster Plus
24/60-3
44320605



ChargeMaster Plus
24/80-2
44320805



ChargeMaster Plus
24/110-2
44321105

24V	24V	24V	24V	24V	24V
20A	30A	40A	60A	80A	100A
12 or 24V	12 or 24V	12 or 24V	12 or 24V	n.a.	n.a.
n.a.	n.a.	5-20A at 24V (adjustable)	5-20A at 24V (adjustable)	n.a.	n.a.
n.a.	n.a.	10A at 12V max. 20A at 24V	10A at 12V max. 20A at 24V	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	14.25/28.5V (12/24V)	14.25/28.5V (12/24V)
n.a.	n.a.	n.a.	n.a.	15A at 12V / 20A at 24V (adjustable)	15A at 12V / 20A at 24V (adjustable)
2.8A/5.6A	4.1A / 8.4A	7.1A / 12.8A	10.1A / 18.7A	11.75 A / 23 A	15.75 A / 31.5 A
20A at 28.8V	30A at 28.8V	40A at 28.8V	60A at 28.8V	80 A at 28.8 V	110 A at 28.8 V
3 (max.)	3 (max.)	3 (max.)	3 (max.)	2 (max.)	2 (max.)
160-400 Ah	200-500 Ah	160-400 Ah	200-500 Ah	280-700 Ah	400-1000 Ah
120/230V (80-275V) 50/60 Hz		120/230V (80-275V) 50/60 Hz		120/230V (80-275V) 50/60 Hz	
screw terminals	screw terminals	screw terminals	screw terminals	screw terminals	screw terminals
yes	yes	yes	yes	yes	yes
LED	LED	LED	LED	LED	LED
11.5" X 8.3" X 4.1" (291 X 210 X 105 mm)		15.1" x 9.8" x 5" (384 x 250 x 127 mm)		15.1" x 9.8" x 5" (384 x 250 x 127 mm)	
5.5lb / 2.5 kg	5.5 lb / 2.5 kg	13 lb / 5.9 kg	13 lb / 5.9 kg	13.9 lb / 6.3 kg	13.9 lb / 6.3 kg
CE, ABYC, UL1236, SAE J1171, ISO 8846, CEC, RCM/C-Tick			CE, ABYC, UL1236, SAE J1171, ISO 8846, CEC, RCM/C-Tick		
IUoUo, automatic, 3-step+ for Gel/AGM/ Lithium Ion (LiFePO4)/traction/spiral		IUoUo, automatic, 3-step+ for Gel/AGM/ Lithium Ion (LiFePO4)/traction/spiral		IUoUo, automatic , 3-step+ for AGM/Gel/flooded/ Lithium Ion and a user defined option	
-17 mV/°F (-30 mV/°C) temperature sensor included through MasterShunt		-17 mV/°F (-30 mV/°C) temperature sensor included through MasterShunt		-76 mV/°F (-60 mV/°C) temperature sensor included through automatic compensation or MasterShunt	
< 2 mA (MasterBus off)		< 2 mA (MasterBus off)		< 2 mA (MasterBus off)	
yes, through MasterBus		yes, through MasterBus		through MasterBus or CZone	
> 0.98	> 0.98	> 0.98	> 0.98	> 0.98	> 0.98
-13°F to 176°F, derating > 104°F (-25°C to 80°C, derating > 40°C)		-13°F to 176°F, derating > 104°F (-25°C to 80°C, derating > 40°C)		-13°F to 176°F, derating > 104°F (-25°C to 80°C, derating > 40°C)	
vario fan	vario fan	vario fan	vario fan	vario fan	vario fan
IP23, vertical mounting		IP23, vertical mounting		IP23, vertical mounting	
over-temperature, overload, short circuit, high/low battery voltage, ignition protection					
MasterBus, CZone, NMEA 2000®		MasterBus, CZone, NMEA 2000®		MasterBus, CZone, NMEA 2000®	
yes, using a Multipurpose Contact Output (part # 77030500)		yes, using a Multipurpose Contact Output (part # 77030500)		yes, using a Multipurpose Contact Output (part # 77030500)	
option	option	option	option	option	option
option	option	option	option	option	option
option	option	option	option	option	option

Mass Combi® Ultra & Mass Combi Pro Inverter/Chargers:

Powerful, complete and versatile

The Mass Combi Ultra series comprises several models, varying from 3000 W to 3500 W. For higher capacities up to 35 kW the Mass Combi Ultra can be used in parallel or 3-phase configurations. An efficient and integrated solar charge regulator helps make the most of your solar panels.

The Mass Combi Ultra Inverter/Charger is equipped with the latest technologies. The new inverter technology ensures a uniquely low stand-by use, while an ultra-fast digital signal processor guarantees seamless switching between all available energy sources. Power assist prevents power dips and failures, even with a weak electricity connection or small generator. Moreover, all Mass Combi Ultra Inverter/Charger models are equipped with MasterBus®.

Higher yield from solar energy

At Mastervolt® we used our knowledge gained in the grid connected solar sector to make a super-efficient built-in MPPT (Maximum Power Point Tracker) solar charge regulator. Compared to most solar charge regulators on the market, the MPPT offers up to 30% more yield from solar panels. The solar panels power 'hidden' consumers and keep your batteries in optimal condition.

'Pro' models

For professional applications, Mastervolt offers a 'Pro' model, featuring all Ultra functions, but without the solar input and second charger output battery charger.

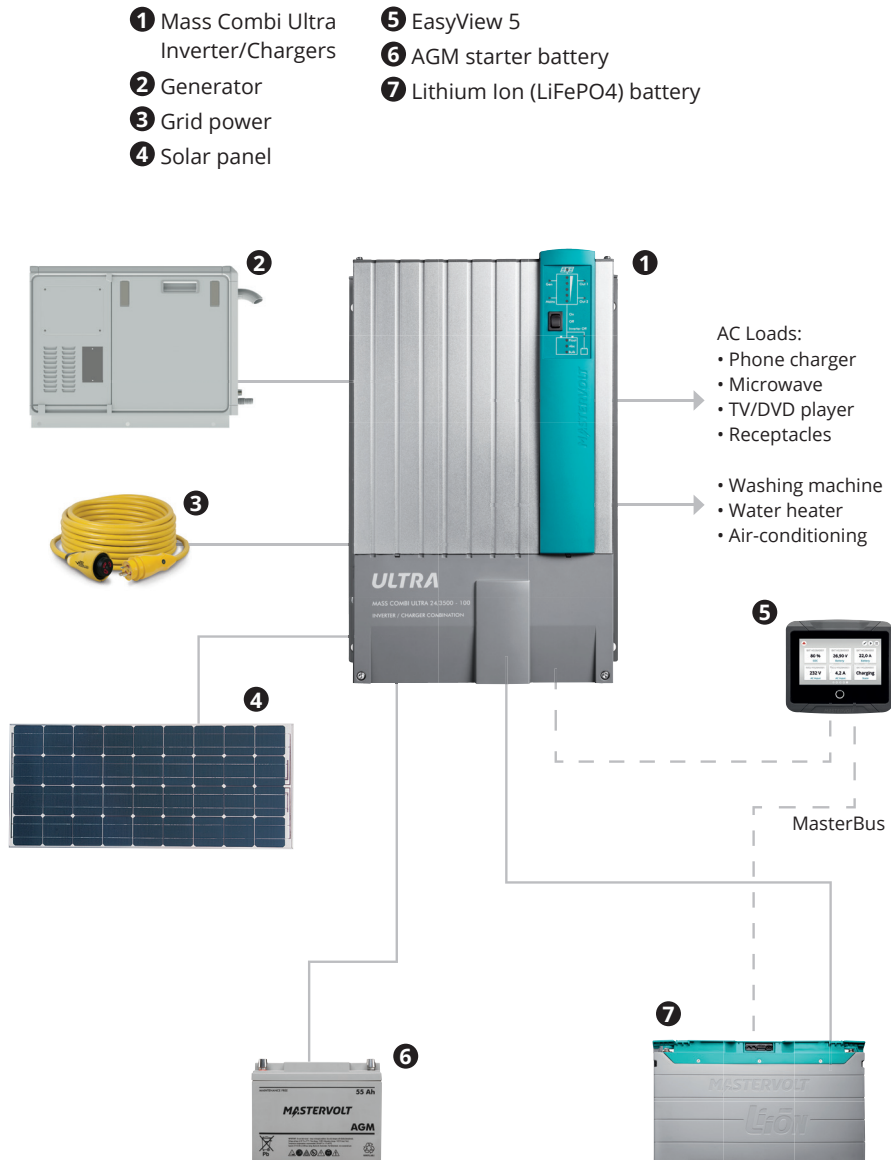
Mass Combi Ultra Features

- For professional and semi-professional use
- Quiet, powerful inverter with 200% peak power
- Compact, lightweight and hum-free thanks to HF technology
- Pure sine wave voltage prevents malfunctions and damage to sensitive equipment such as adapters
- High yield and more power from your batteries
- Intelligent 3-step+ battery charger with low DC ripple current for fast charging times and long battery life
- Power Assist: prevents blown fuses
- A dynamic battery voltage window allows you to enjoy AC power for longer without damaging your batteries
- Active Optima Cooling concept prevents unnecessary fan noise
- Charges two individual battery banks simultaneously (Mass Combi Ultra)
- An integrated MPPT solar charge controller allows for 30% more yield from solar power for charging the batteries (Mass Combi Ultra)
- Quick installation and reliable professional connections
- CE and ABYC certified

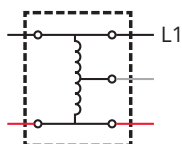


Standard MasterBus® System—Mass Combi Ultra and Mass Combi Pro Inverter/Chargers—230V up to 35 kW

- Compact and lightweight inverter/charger combination
- Two AC inputs with seamless transfer between generator and shore power
- Integrated MPPT solar charger regulator
- Parallel & 120/240V Split-Phase operation (with the use of autoformer)



Auto Transformer



120V/240V split-phase operation

For more powerful systems the Mass Combi Ultra and Mass Combi Pro Inverter/Chargers allow parallel use up to 10 units. With 240V input and the use of an auto transformer the units provide 120/240V split-phase. Powering the 120V and 240V ships AC loads.



Best in class performance

The Mass Combi Ultra and Mass Combi Pro Inverter/Chargers can provide continuous inverter power at 105°F (40°C) with a 200% startup surge. The battery charger is best in its class providing a powerful charge to the main house battery bank.

Ease of installation

The carefully designed connections were optimized for installers. Installation and connection have been made quick and easy via a logic layout, solid terminals and by removing the need for cable glands.

Dual AC inputs and outputs

The Mass Combi Ultra and Mass Combi Pro Inverter/Chargers have inputs for generator or mains supply, each optimized for the power source. A robust intelligent transfer system switches seamlessly between AC power, generator and inverter, and ensures a constant power supply. Flickering lights or failure of electronic equipment belong to the past. Separate AC outputs provide the ability to power heavy users via mains and/or generator.

Higher yield from solar power

On the DC side the Mass Combi Ultra Inverter/Chargers has interesting features such as the solar input and the second charger output. Mastervolt has leveraged on the knowledge gained in the grid-connected solar sector to make a super-efficient built-in MPPT solar charge regulator. Compared to most regulators on the market, the MPPT offers a far higher yield from solar power for charging your batteries.

Home comforts

The Mass Combi Ultra and Mass Combi Pro Inverter/Chargers feature separate AC outputs. One is permanently powered to supply critical loads such as refrigerators and audio systems. The other output is for non-preferential loads including water heaters that can be switched off automatically at any desired setting, always to the benefit of the critical loads.

Optimal battery usage

Based on Mastervolt's many years of experience, the Mass Combi Ultra and Mass Combi Pro Inverter/Chargers feature a number of characteristics that ensure you get the most from your batteries in terms of maximum power and lifespan. Key examples include the pure, interference-free DC voltage that prevents unnecessary heating of the batteries and a low 'no load' current that guarantees every Ah is deployed in an optimal way.

Quiet operation

The Mass Combi Ultra and Mass Combi Pro Inverter/Chargers can provide up to 50% of the charging current or inverter capacity without fan cooling. This is perfect for night-time operation; if little power is consumed, the fan stops turning and goes silent. When maximum capacity is required, or the ambient temperature is very high, the Active Optima Cooling concept regulates the fan speed in a linear way, ensuring that it never spins too fast or makes any unnecessary ticking noises.

Mass Combi® Ultra & Mass Combi Pro Inverter/Chargers

Specifications – 230V



Mass Combi Ultra
12/3000-150



Mass Combi Ultra
24/3500-100



Mass Combi Ultra
48/3500-50

Part #	12/3500-150 38013000	24/3500-100 38023500	48/3500-50 38343500
Specifications Sine Wave Inverter			
Nominal DC voltage	12V (9.5–16V)	24V (19–32V)	48V (38–62V)
Output voltage	180–260V, adjustable	180–260V, adjustable	180–260V, adjustable
Output waveform	true sine	true sine	true sine
Continuous power at 104°F (40°C), cos phi 1	3000 W	3500 W	3500 W
Surge capability	6000 W	7000 W	7000 W
Parallel configuration For larger systems, an external transfer system is required	yes, up to 10 standard	yes, up to 10 standard	yes, up to 10 standard
3-Phase configuration	yes, up to 3x3	yes, up to 3x3	yes, up to 3x3
Max. efficiency	≥ 90%	≥ 92%	≥ 93%
Energy saving mode consumption	7 W	7 W	7 W
Specifications Battery Charger			
Max. charge current at 104°F (40°C) adjustable	150A at 14.25V	100A at 28.5V	50A at 57V
Secondary charger output voltage	12V	12/24V selectable, 3-step+	12/24V selectable, 3-step+
Secondary charger output current	10A	10A	10A
Battery temperature sensor	yes, included	yes, included	yes, included
Specifications Transfer System			
AC input (generator)	50A (switched)	50A (switched)	50A (switched)
AC input (mains)	30A (switched)	30A (switched)	30A (switched)
AC output 1	67A	67A	67A
AC output 2	50A (switched)	50A (switched)	50A (switched)
Transfer speed	seamless (< 1 ms)	seamless (< 1 ms)	seamless (< 1 ms)
Solar Input DC Specifications			
Input voltage range	25–50V	25–100V	n.a.
Max. PV peak power	500 Wp	500 Wp	n.a.
Max. input current	19A	19A	n.a.
Max. charge current	30A at 14.25V	15A at 28.5V	n.a.
MPP Tracker	full power at 25–50V	full power at 35–80V	n.a.
General Specifications			
Display/read-out	LED display	LED display	LED display
Dimensions, hwxwd	18.6" x 12.5" x 7" 472 x 318 x 178 mm	18.6" x 12.5" x 7" 472 x 318 x 178 mm	18.6" x 12.5" x 7" 472 x 318 x 178 mm
Weight	33.7 lb / 15.3 kg	33.7 lb / 15.3 kg	33.7 lb / 15.3 kg
Approvals	CE, E-mark, ABYC, RMRS	CE, E-mark, ABYC, RMRS	CE, E-mark, ABYC, RMRS
Technical Specifications			
Charge characteristic	IUoUo, automatic 3-step+ for AGM/Gel/MLI/flooded/traction/spiral		
Ground relay	yes, configurable	yes, configurable	yes, configurable
Temperature range (ambient temp.)	-13°F to 140°F, derating > 104°F (-25°C to 60°C, derating > 40°C)		
Cooling	vario fan	vario fan	vario fan
Protection degree	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)
Protections	over-temperature, overload, short circuit, high/low battery voltage		
MasterBus® compatible	yes	yes	yes
Integrates with Fathom®	yes, in combination with batteries, smart battery management and display UI		
Options			
Temperature Sensors 41500500, 6M 41500800, 15M	 included option	included option	included option
EasyView 5 77010310	 option	option	option
Mastervolt® USB Interface 77030100	 option	option	option
RJ12 communication / sync cable, available lengths: 3.3', 9.8', 19.7', 32.8' or 49.2'	 option	option	option
High quality communication cable fitted with RJ12 type modular plugs, suitable for connecting a remote control panel Also suitable as a sync cable for Mass Combi Ultra or Mass Combi Pro Inverter/Chargers models, both in parallel or 3-phase configurations.			



Mass Combi Pro
12/3000-150
38513000



Mass Combi Pro
24/3500-100
38523500

12V (9.5–16V)	24V (19–32V)
180–260V, adjustable	180–260V, adjustable
true sine	true sine
3000 W	3500 W
6000 W	7000 W
yes, up to 10 standard	yes, up to 10 standard
yes, up to 3x3	yes, up to 3x3
≥ 90%	≥ 92%
7 W	7 W

150A at 14.25V	100A at 28.5V
n.a.	n.a.
n.a.	n.a.
yes, included	yes, included

50A (switched)	50A (switched)
30A (switched)	30A (switched)
67A	67A
50A (switched)	50A (switched)
seamless (< 1 ms)	seamless (< 1 ms)

n.a.	n.a.
n.a.	n.a.
n.a.	n.a.
n.a.	n.a.
n.a.	n.a.

LED display	LED display
18.6" x 12.5" x 7"	18.6" x 12.5" x 7"
472 x 318 x 178 mm	472 x 318 x 178 mm
33.7 lb / 15.3 kg	33.7 lb / 15.3 kg
CE, E-mark, ABYC	CE, E-mark, ABYC

IUoUo, automatic 3-step+ for AGM/Gel/MLI/flooded/traction/spiral	
yes, configurable	yes, configurable
-13°F to 140°F, derating > 104°F (-25°C to 60°C, derating > 40°C)	
vario fan	vario fan
IP23 (vertical mounting)	IP23 (vertical mounting)
over-temperature, overload, short circuit, high/low battery voltage	
yes	yes
yes, in combination with batteries, smart battery management and display UI	

included
option

option

option

included
option

option

option



Mastervolt® DC-DC Converters:

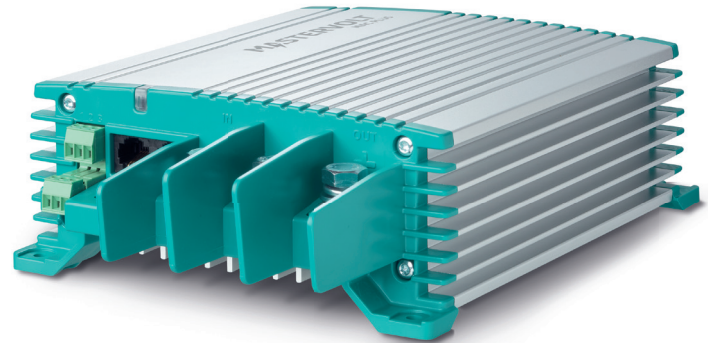
For 12V, 24V and 48V

A DC-DC converter can provide other voltages than applied in your basic system. By using a DC-DC converter, other voltages can be reached. They also ensure that all your equipment has a stable power supply with the right voltage.

Mac Plus Series

- Professional use
- Converter and 3-step battery charger
- Parallel switchable
- Adjustable and programmable output voltage
- Voltage stabilization for a longer lifespan of halogen lights, etc
- Dimmer function
- Optimal charging in Euro 5/6 applications

The **Mac Plus** is ideal for charging service batteries in vehicles with a smart Euro 5/6 alternator, charging the batteries quickly, even when the alternator is inactive and the battery voltage very low. The automatic start/stop function ensures that empty starter batteries become a thing of the past. The Mac Plus comes with integrated MasterBus® (CAN) communication, CZone®/NMEA 2000® and E-mark certification. It seamlessly charges Lithium Ion, Gel and AGM batteries via the tried and tested Mastervolt 3-stage charging method.



Non-isolated or isolated

The non-isolated Mac Plus models have an electrical connection between the input and output.

Features:

- Low costs
- Efficient: low heat generation
- Compact
- Suited to applications with negative earthing

Features:

- Extra touch-proof
- Interference suppression for sensitive equipment
- Available with negative or positive grounding



Programmable via laptop or PC



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

Euro 5/6 solutions



Charging service batteries in Euro 5/6 applications? The Mac Plus provides constant power to the service battery, even when the alternator is inactive.

3-Step battery charger



Connected to the 12V or 24V main battery, the converter can also be used as an advanced 3-step+ battery charger for Gel, AGM, flooded or Lithium Ion batteries

Energy-saving dimmer function



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

Parallel operation



Lots of consumers on board? The parallel configuration of several units will provide you over 100 amps. Advanced high-frequency technology with modern microprocessors ensures minimum power loss when switching from 24V to 12V and vice versa.

Mac Plus DC-DC Converters

**EXPANDED
OFFERING**


Specifications



Mac Plus 12/12V-50



Mac Plus 12/24V-30



Mac Plus 24/12V-50



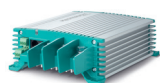
Mac Plus 24/24V-30



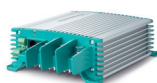
Mac Plus 24/24V-50

Part # (IP23)	81205105	81205305	81205205	81205405	81205505
Specifications Input					
Nominal input voltage	12V	12V	24V	24V	24V
Input range	8 - 16V DC	8 - 16V DC	16 - 32V DC	16 - 32V DC	16 - 32V DC
Specifications Output					
Nominal output voltage	12V DC	24V DC	12V DC	24V DC	24V DC
Output voltage	10-15V DC	20-30V DC	10-15V DC	20-30V DC	20-30V DC
Output voltage dimmer*	n.a.	n.a.	n.a.	n.a.	n.a.
Output voltage stabilisation	2% at extremes of temperatures, load and input				
Ripple	max. 1% peak peak	max. 1% peak peak	max. 1% peak peak	max. 1% peak peak	max. 1% peak peak
Power (max./nominal)	750 / 710 W	760 / 760 W	750 / 710 W	900 / 850 W	1500 / 1425 W
Max. current	50A	30A	50A	30A	50A
Parallel configuration	yes	yes	yes	yes	yes
Charge current – 3-step mode	50A	30A	50A	30A	50A
General Specifications					
Galvanic isolation	no	no	no	no	no
Voltage limited	yes	yes	yes	yes	yes
Efficiency	> 95% (at nom. input voltage, full load); 97% peak				
Protections	DC short circuit, overload, over-temperature, reversed polarity (fuse)				
Dimmer function	n.a.	n.a.	n.a.	n.a.	n.a.
Alarm contact	yes, through MasterBus® and CZone®				
Dimensions, HxWxD	10" x 6.5" x 2.6" 255 x 165 x 66 mm	10" x 6.5" x 2.6" 255 x 165 x 66 mm	10" x 6.5" x 2.6" 255 x 165 x 66 mm	10" x 6.5" x 2.6" 255 x 165 x 66 mm	10" x 6.5" x 2.6" 255 x 165 x 66 mm
Weight	4.4 lb / 2 kg	4.4 lb / 2 kg	4.4 lb / 2 kg	4.4 lb / 2 kg	4.4 lb / 2 kg
Approvals	CE, E-Mark, SAE J1171 & ISO 8846 Ignition Protected	CE, E-Mark, SAE J1171 & ISO 8846 Ignition Protected	CE, E-Mark, SAE J1171 & ISO 8846 Ignition Protected	CE, E-Mark, SAE J1171 & ISO 8846 Ignition Protected	CE, E-Mark, SAE J1171 & ISO 8846 Ignition Protected
Technical Specifications					
3-Step charge option	yes (DIP switch settings)	yes (DIP switch settings)	yes (DIP switch settings)	yes (DIP switch settings)	yes (DIP switch settings)
DC consumption	<5 mA	<5 mA	<5 mA	<5 mA	<5 mA
Connections input/output	3 x M8 terminal for cable diameters of 10-50 mm ² , (positive input, positive output, joint negative connection) 6-pole screw connection for cable diameters of 0.75-1.5 mm ² (remote on/off, temperature sensor, voltage measurement)				
Temperature range (ambient temp.)	-13°F-140°F, >104°F derating (-25°C-60°C, >40°C derating)				
Cooling	natural cooling	natural cooling	natural cooling	natural cooling	natural cooling
Protection degree	IP23	IP23	IP23	IP23	IP23
MasterBus compatible / CZone Compatible	yes / yes	yes / yes	yes / yes	yes / yes	yes / yes
Integrates with Fathom® Fathom 3000 Series Fathom 5000 Series Fathom 7000 Series	option option option	no option option	option option option	no option option	no no standard
Options					
EasyView 5 77010310	option	option	option	option	option
	 Waterproof system monitor with 'daylight readable' color display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.				
Temperature Sensors 41500500 , 6M 41500800 , 15M	included option	included option	included option	included option	included option

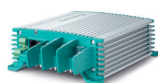
* Adjustable with MasterAdjust software.



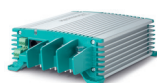
Mac Plus 12/48V-15



Mac Plus 24/48V-15



Mac Plus 48/12-50



Mac Plus 48/24-30

81203205 **NEW**81203405 **NEW**81203105 **NEW**81203305 **NEW**

12V

24V

36/48V

36/48V

8 - 16V DC

18 - 32V DC

32 - 64V DC

32 - 64V DC

36/48V DC

36/48V DC

12V DC

24V DC

30-60V DC

30-60V DC

10-15V DC

20-30V DC

n.a.

n.a.

n.a.

n.a.

2% at extremes of temperatures, load and input

max. 1% peak peak

max. 1% peak peak

max. 1% peak peak

max. 1% peak peak

900 / 855 W

900 / 855 W

750 / 710 W

900 / 855 W

15A

15A

50A

30A

yes

yes

yes

yes

15A

15A

50A

30A

no

no

no

no

yes

yes

yes

yes

> 95% at full output

DC short circuit, overload, over-temperature, reversed polarity (fuse)

n.a.

n.a.

n.a.

n.a.

yes, through MasterBus & CZone

10" x 6.5" x 2.6"

10" x 6.5" x 2.6"

10" x 6.5" x 2.6"

10" x 6.5" x 2.6"

255 x 165 x 66 mm

255 x 165 x 66 mm

255 x 165 x 66 mm

255 x 165 x 66 mm

4.4 lb / 2 kg

4.4 lb / 2 kg

4.4 lb / 2 kg

4.4 lb / 2 kg

CE, E-Mark, SAE J1171
& ISO 8846 Ignition
ProtectedCE, E-Mark, SAE J1171
& ISO 8846 Ignition
ProtectedCE, E-Mark, SAE J1171
& ISO 8846 Ignition
ProtectedCE, E-Mark, SAE J1171
& ISO 8846 Ignition
Protectedyes (DIP switch
settings)yes (DIP switch
settings)yes (DIP switch
settings)yes (DIP switch
settings)

<5 mA

<5 mA

<5 mA

<5 mA

M8 screw terminal, wire size 10 to 50mm² (AWG 0 to 8)

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

natural cooling

natural cooling

natural cooling

natural cooling

IP23

IP23

IP23

IP23

yes (not powering)
/ yesyes (not powering)
/ yesyes (not powering)
/ yesyes (not powering)
/ yes

no

no

no

no

no

no

no

no

standard

option

option

option

option

option

option

option

Waterproof system monitor with 'daylight readable' color display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.

included
optionincluded
optionincluded
optionincluded
option

Mac Plus series:

Robust DC-DC charger guarantees optimal condition of your service battery

Traditionally, a service battery is linked to the starter battery by means of a charge relay. The starter battery is located close to the alternator and receives most of the charge current.

However, the service battery is usually further away. Long cables cause voltage drop, leading to slow charging, resulting in failing appliances and premature failure of the battery.

Modern, fuel efficient engines are equipped with smart alternators, following regulations such as Euro 5 and Euro 6. Instead of a constant output, smart alternators provide a variable voltage; after a brief charging period, voltage is reduced and the charging stops.

Furthermore, the energy produced by regenerative braking leads to voltage peaks. Service batteries coupled in the traditional way will receive hardly any charge and may be damaged by these peak voltages.

To solve these issues, Mastervolt® introduces the Mac Plus DC-DC chargers, available in 12, 24 and 48V (and supports 36V). The Mac Plus monitors the service battery and compensates the voltage loss. The proven 3-step charge method ensures a quick and safe charge. Moreover, by stabilizing the charge voltage, Mac Plus protects your service battery and sensitive equipment.

Features

- Fast and safe charging during short trips
- Fanless design for silent operation
- Suitable for flooded, Gel, AGM and Li-Ion batteries (incl. LiFePO₄)
- Charges even fully depleted batteries
- Engine run detection protects starter battery
- Adjustable current limits to meet Euro 5/6 requirements
- Voltage stabilisation protects sensitive equipment, lights and loads
- Parallel operation to obtain charging capacities well over 100 amps
- MasterBus for intelligent system monitoring and automation
- Temperature compensation and voltage sense for an optimal charging result
- E-mark certification for mobile applications.
- Power supply mode
- Heavy duty connections for easy installation and quick set up via DIP switches

Mass Sine Ultra and Mass Sine Inverters: For the toughest tasks



Even under the most extreme conditions the products from the Mass series operate faultlessly, giving you round-the-clock output when necessary. With an MTBF of 180,000 hours at full capacity and 24/7 use, the Mass products are ideal for the toughest tasks and any situation that requires a reliable power supply.

Optimal flexibility in system design

Choosing an independent sine wave inverter allows you complete freedom of choice of battery charging equipment. You can freely adapt the rating of these chargers, depending on the desired charge time. In case you want to use renewable energy sources, you may want to choose an MPPT solar charge regulator.

High efficiency

The high efficiency and automatic economy mode is designed to allow digital clocks to work properly and ensure you many more hours of operation from your batteries. The application of high-frequency technology prevents any annoying humming and zooming sounds, while the high peak capacity ensures that the high inrush current required for electrical tools, for example, is seamlessly produced.



Mass Sine Ultra and Mass Sine Features

- For heavy duty work in professional and semi-professional applications
- Full capacity at temperatures up to 104°F (40°C)
- Pure sine wave output prevents failures and damage to connected sensitive equipment
- High peak capacity for the seamless switching on of complex and heavy loads
- Dynamic, battery-specific input current for an optimal use of every type of battery (Mass Sine Ultra Inverter)
- Parallel configuration of up to ten devices for a capacity up to 40 kW (Mass Sine Ultra Inverter)
- 3-Phase configuration for a capacity up to 36 kW (Mass Sine Ultra Inverter)
- Integrated MasterBus® (Mass Sine Ultra Inverter) or MasterBus compatible (Mass Sine Inverter)
- Suitable for mobile applications
- Professional connections
- Automatic, reliable and safe operation
- Optional: Masterswitch/Systemswitch for automatic selection of the desired energy source

Mass Sine Ultra

With an AC capacity of 4000W in one unit, the Mass Sine Ultra Inverter can satisfy even the greatest energy demands. As ten units can be switched in parallel or 3x3 in a three-stage configuration, the Mass Sine Ultra Inverter can supply a capacity of up to 40 kW. The inverter provides full power at 104°F (40°C) and works smoothly even in extreme conditions such as engine rooms and technical spaces. Like all Mass products, the inverter is supplied in a compact and robust casing. This inverter is the best choice if you are looking for autonomous AC capacity of over 3 kW.

Latest technology

The extremely efficient power electronics save volume and weight with minimal sound levels and a very low ripple voltage which extends the lifespan of your batteries. At the same time, digital technology prevents any annoying flickering and voltage fluctuations.

Make the most of your batteries

The Mass Sine Ultra Inverter is equipped with a dynamic battery voltage window. Taking into account the type of battery and current, this function ensures the inverter can supply AC longer without overtaxing the batteries.

Mass Sine

Mastervolt®'s Mass Sine inverters have been proving their value in the most extreme conditions for over 25 years.

Clear indicators

The Mass Sine Inverter features easy controls on the device itself. As inverters are often built in, we also supply an effective remote control panel, the C4-RI. In addition, the Mass can be controlled via its intuitive display, the EasyView 5, thanks to the integration of MasterBus communication using a MasterBus Inverter Interface or AC Power Analyser.

Easy and safe connections

The Mass Sine inverters provide robust and professional connections for fast and safe installation.

Mass Sine and Mass Sine Ultra Inverters Specifications – 230V



Mass Sine 12/2000*



Mass Sine 24/800*



Mass Sine 24/1500*

Part # 230V	24012000	24020800	24021500
General Specifications			
Nominal battery voltage	12V	24V	24V
Recommended battery capacity	>200 Ah	>50 Ah	>150 Ah
Output voltage (± 5%)	230V – 50Hz (± 0.01Hz)	230V – 50Hz (± 0.01Hz)	230V – 50Hz (± 0.01Hz)
P30 power at 104°F (40°C), cos phi 1	2000 W	800 W	1500 W
Continuous power at 104°F (40°C), cos phi 1	1800 W	650 W	1200 W
Peak load	4000 W	1600 W	2900 W
Output waveform	true sine	true sine	true sine
Efficiency	92%	92%	92%
Display/read-out	LED display	LED display	LED display
Parallel configuration	no	no	no
3-Phase configuration	no	no	no
Dimensions, HxWxD	16.5" x 12.5" x 5.1" 420 x 318 x 130 mm	12.8" x 8.7" x 4.4" 325 x 220 x 111 mm	13.4" x 10.3" x 5.1" 340 x 261 x 130 mm
Weight	22.3 lb / 10.1 kg	8.6 lb / 3.9 kg	13.7 lb / 6.2 kg
Approvals	CE, E-mark, ABYC A-31, RRR	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31
Technical Specification			
Technology	HF switch mode	HF switch mode	HF switch mode
Max. ripple on DC (battery)	5% RMS	5% RMS	5% RMS
Input current (nominal load)	183A	36A	68A
No load power consumption: • 'on' mode (230V) • energy saving mode	480 mA – 6 W 50 mA – 0.6 W	240 mA – 5.6 W 35 mA – 0.8 W	200 mA – 5 W 25 mA – 0.6 W
Minimal DC fuse (slow blow)**	250A	63A	100A
Minimal cable size	70 mm ²	16 mm ²	25 mm ²
Harmonic distortion typical	<5%	<5%	<5%
Cos Phi	all power factors allowed	all power factors allowed	all power factors allowed
Temperature range (ambient temp.)	-13°F–176°F, >104°F derating (-25°C–80°C >40°C derating)		
Cooling	natural/forced	natural/forced	natural/forced
Transfer System	The Masterswitch/Systemswitch can be connected to all sine wave inverters		
Protection degree	IP23	IP23	IP23
Protections	over temperature, over load, short circuit, high/low battery voltage		
MasterBus® compatible	with MB Inverter Interface or AC Power Analyser	with MB Inverter Interface or AC Power Analyser	with MB Inverter Interface or AC Power Analyser
AC connection	internal	internal	internal
Options			
EasyView 5 77010310	 option In combination with MasterBus Inverter Interface. Waterproof system monitor with 'daylight readable' color display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.	option	option
Mastervolt® USB Interface 77030100	 option In combination with MasterBus Inverter Interface. Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when combined with MasterView System software (free to download).	option	option
MasterBus Inverter Interface 77030700	 option Integrates the Mass Sine Inverter in a MasterBus network in a MasterBus network.	option	option
AC Power Analyser 77031200	 option Integrates the Mass Sine Inverter in a MasterBus network and measures the AC voltage, current and power.	option	option

* Also available in 60 Hz: 2000W model: Part # 24112000 800 W model: Part # 24120800 1500 W model: Part # 24121500
2500 W model: Part # 24122500 5000 W model: Part # 24195100

** DC fuse depends on the cable size.



Mass Sine
24/2500*
24022500



Mass Sine Ultra
24/4000
26024000



Mass Sine
24/5000*
24095100

24V	24V	24V
>200 Ah	>350 Ah	>400 Ah
230V – 50Hz (± 0.01Hz)	230V (± 2%) – 50/60 Hz selectable (± 0.005%)	230V (± 2%) – 50/60 Hz selectable
2500 W	—	5000 W
2000 W	4000 W	4000 W
5000 W	7000 W	9000 W
true sine	true sine	true sine
92%	≥ 92%	92%
LED display	LED display	LED display
no	yes, up to 10 units	no
no	yes, up to 3x3	no
16.5" x 12.5" x 5.1" 420 x 318 x 130 mm	18.6" x 12.5" x 6.9" 472 x 318 x 178 mm	18.5" x 12.4" x 10" 470 x 315 x 254 mm
22.3 lb / 10.1 kg	33.1 lb / 15 kg	41.9 lb / 19 kg
CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31
HF switch mode	V6 HF switch mode	HF switch mode
5% RMS	5% RMS	5% RMS
115A	200A	230A
250 mA – 6 W 25 mA – 0.6 W	660 mA – 16 W 300 mA – 7 W	250 mA – 6 W 50 mA – 1.2 W
160A	250A	1x 250A or 2x 125A
50 mm ²	70 mm ²	2x 70 mm ²
<5%	<1%	<5%
all power factors allowed	all power factors allowed	all power factors allowed
-13°F–176°F, >104°F derating (-25°C–80°C >40°C derating)		
natural/forced	natural/forced	natural/forced
The Masterswitch/Systemswitch can be connected to all sine wave inverters		
IP23	IP23	IP23
over temperature, over load, short circuit, high/low battery voltage		
with MB Inverter Interface or AC Power Analyser	yes	with MB Inverter Interface or AC Power Analyser
internal	internal	internal
option	option	option
option	n.a.	option
option	n.a.	option
option	n.a.	option

The following models are also available in Quick Connect (OEM) version with a WAGO 770-103 connector and 25 cm cable:

- Mass Sine Inverter
12/2000 230V,
part # 24021002
- Mass Sine Inverter
12/2000 120V,
part # 25012002

CombiMaster® Inverter/Chargers **NEW**

The CombiMaster inverter/charger delivers pure sine wave inverter power and multi-chemistry battery charging plus the intelligent new design communicates seamlessly with NMEA 2000®,

CZone and MasterBus® networks, and integrates with the Fathom® e-power system.

Designed with the customer in mind and using the latest technology, the CombiMaster is all about user-friendliness and reliability. But don't let that friendly appearance misguide you: the powerful CombiMaster range drives even the most complex and heavy loads with ease!

With the CombiMaster, power dips and failures belong to the past. The automatic AC transfer system switches seamlessly between generator or mains and inverter output, ensuring a constant power supply. Its Power Assist function prevents tripping of the mains fuse in case you're connected to a weak land line or small generator.

The CombiMaster delivers unmatched performance at an unprecedented price. As you would expect from Mastervolt®, the CombiMaster is completed with MasterBus, CZone and NMEA 2000® compatible communication and Fathom integration, allowing for a broad range of monitoring and system integration options.



CombiMaster Features

- Dependable quality for leisure and semi-professional applications
- Most compact and lightweight inverter/charger in its class
- Reliable, cost effective and hum-free
- High power rating and >200% peak power to start even the heaviest loads
- Pure sine technology prevents malfunctions and damage to electronic equipment
- Low-loss HF technology allows for longer operation from your batteries
- Powerful and Intelligent 3-step+ battery charger for fast and safe charging
- Fast, automatic switching between mains and inverter mode
- Power assist prevents blown mains fuses.
- Generator compatible
- Quick installation and heavy duty connections
- UL, CE and E-mark certified
- With a DC input voltage range from 10–18V DC and flat battery support at 25% under 10V. The new CombiMaster ensures fast, safe, and efficient charging of your Flooded, AGM, Gel, Li-ion batteries.
- Wide AC input range (90-140V AC) insures functionality of AC devices even with adverse input power conditions
- The new 24V models in 3500W & 4500W and 48V 5000W unit can create parallel and series stacked systems to power up to 35kW and be used to power split phase loads.

Remote Control and Monitoring Options

- MasterBus compatible via SmartRemote or EasyView 5 displays.
- CZone compatible via Touch 5 or Touch 10.
- NMEA 2000® compatible via 3rd Party MFD.



CombiMaster® Inverter/Chargers

Specifications – 230V



Part #	CombiMaster 12/2000-60 35012000	CombiMaster 12/3000-100 35013000	CombiMaster 24/2000-40 35022000	CombiMaster 24/3000-60 35023000
General Specifications Sine Wave Inverter				
Nominal DC voltage	12V (10.2–16V)	12V (10.2–16V)	24V (20.4–32V)	24V (20.4–32V)
Continuous power at 104°F (40°C)	2000V A / 1600 W	3000V A / 2600 W	2000V A / 1600 W	3000V A / 2600 W
Peak power (30 sec)	3000V A / 2400 W	4500V A / 3900 W	3000V A / 2400 W	4500V A / 3900 W
Surge power (5 sec)	4000V A / 3200 W	6000V A / 5200 W	4000V A / 3200 W	6000V A / 5200 W
Synchronize with mains/generator	yes	yes	yes	yes
Output voltage	230V 50/60 Hz, configurable	230V 50/60 Hz, configurable	230V 50/60 Hz, configurable	230V 50/60 Hz, configurable
Output waveform	true sine	true sine	true sine	true sine
Max. efficiency	≥ 93%	≥ 93%	≥ 93%	≥ 93%
Max. ripple on DC (battery at full load)	< 15%	< 15%	< 15%	< 15%
Battery no-load power consumption	20 W on mode / < 1 mA off mode	30 W on mode / < 1 mA off mode	20 W on mode / < 1 mA off mode	30 W on mode / < 1 mA off mode
Energy saving mode consumption	10 W	10 W	10 W	10 W
General Specifications Battery Charger				
Input voltage range	90–280V power derating below 170V	90–280V power derating below 170V	90–280V power derating below 170V	90–280V power derating below 170V
Max. input current	6A (adjustable)	10A (adjustable)	8A	13A
Max. charge current at 104 °F (40 °C)	60A at 14.25V, configurable	100A at 14.25V, configurable	40A at 28.5V, configurable	60A at 28.5V, configurable
Battery temperature sensor	yes, included	yes, included	yes, included	yes, included
Battery voltage sense	automatic compensation	automatic compensation	automatic compensation	automatic compensation
Specifications Transfer System				
AC input	25A (switched)	25A (switched)	25A (switched)	25A (switched)
AC output	33A	33A	33A	38A
AC input fuse	yes	yes	yes	yes
Transfer speed	10 ms for narrow input range, 20 ms for wide range, configurable	10 ms for narrow input range, 20 ms for wide range, configurable	10 ms for narrow input range, 20 ms for wide range, configurable	10 ms for narrow input range, 20 ms for wide range, configurable
Transfer voltage range	narrow input range (170-280V) wide range (90-280V)			
Transfer frequency range	40–65 Hz	40–65 Hz	40–65 Hz	40–65 Hz
General Specifications				
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hwxwd	14.6" × 11.2" × 6.1" 371 × 284 × 155 mm	17.6" × 11.2" × 6.1" 448 × 284 × 155 mm	14.6" × 11.2" × 6.1" 371 × 284 × 155 mm	17.6" × 11.2" × 6.1" 448 × 284 × 155 mm
Weight	15.2 lb / 6.9 kg	20.5 lb / 9.3 kg	15.2 lb / 6.9 kg	20.5 lb / 9.3 kg
Approvals	CE, E-mark, AZ/NZS	CE, E-mark, AZ/NZS	CE, E-mark, AZ/NZS	CE, E-mark, AZ/NZS
Technical Specifications				
Charge characteristic	IUoUo, automatic / 3-step+ for flooded, Gel/AGM and MLI, configurable	IUoUo, automatic / 3-step+ for flooded, Gel/AGM and MLI, configurable	IUoUo, automatic / 3-step+ for flooded, Gel/AGM and MLI, configurable	IUoUo, automatic / 3-step+ for flooded, Gel/AGM and MLI, configurable
Recommended battery capacity	~100–800 Ah (based on gel batteries, may differ for other types)	~200–1000 Ah (based on gel batteries, may differ for other types)	~100–800 Ah (based on gel batteries, may differ for other types)	~140–1000 Ah (based on gel batteries, may differ for other types)
Ground relay	yes, configurable by means of mechanical jumper	yes, configurable by means of mechanical jumper	yes, configurable by means of mechanical jumper	yes, configurable by means of mechanical jumper
Temperature range (ambient temp.)	-13°F to 140°F, derating 104°F (-25°C to 60°C, derating > 40°C)			
Cooling	vario fan	vario fan	vario fan	vario fan
Protection degree	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)
Safety class	IEC protection class I	IEC protection class I	IEC protection class I	IEC protection class I
Humidity protection	conformal coating, max. 95% relative humidity, non condensing	conformal coating, max. 95% relative humidity, non condensing	conformal coating, max. 95% relative humidity, non condensing	conformal coating, max. 95% relative humidity, non condensing
Protections	over temperature, overload, short circuit, high/low battery voltage	over temperature, overload, short circuit, high/low battery voltage	over temperature, overload, short circuit, high/low battery voltage	over temperature, overload, short circuit, high/low battery voltage
Power Assist	yes, will support AC input power from the battery	yes, will support AC input power from the battery	yes, will support AC input power from the battery	yes, will support AC input power from the battery
Power Sharing	yes, allows you to select AC Input fuse setting	yes, allows you to select AC Input fuse setting	yes, allows you to select AC Input fuse setting	yes, allows you to select AC Input fuse setting
Communication	MasterBus & CZone	MasterBus & CZone	MasterBus & CZone	MasterBus & CZone
Integrates with Fathom	yes, in combination with batteries, smart battery management and display UI	yes, in combination with batteries, smart battery management and display UI	yes, in combination with batteries, smart battery management and display UI	yes, in combination with batteries, smart battery management and display UI
New available accessories (3500 W/ 4500 W & 5000 W models only)				
6502200010	Mastervolt® CombiMaster Current Sharing cable 1 mtr			
6502200030	Mastervolt CombiMaster Current Sharing cable 3 mtr			
6502200060	Mastervolt CombiMaster Current Sharing cable 6 mtr			
6502200410	Mastervolt CombiMaster Communication cable 1 mtr			
6502200430	Mastervolt CombiMaster Communication cable 3 mtr			
6502200460	Mastervolt CombiMaster Communication cable 6 mtr			
6502200500	Mastervolt Cable Strain Relief Bracket			
6502200600	CombiMaster Cabel Kit for 2 units in Parallel			
6502200700	CombiMaster Cabel Kit for 3rd unit in Parallel			
6502200800	CombiMaster Cabel Kit for Split phase operation			

CombiMaster® Inverter/Chargers

EXPANDED
OFFERING

Specifications – 120V



	CombiMaster 12/1500-60	CombiMaster 12/2000-100	CombiMaster 12/3000-160	CombiMaster 12/3500-200
Part #	35511500	35512000	35513000	35513500
General Specifications Sine Wave Inverter				
Nominal DC voltage	12V (10.2–16V)	12V (10.2–16V)	12V (10.2–16V)	12V (10.2–16V)
Continuous power at 104°F (40°C)	1500 W	2000 W	3000 W	3500 W
Peak power (30 sec)	2250 W	3000 W	4500 W	5250 W
Surge power (5 sec)	3000 W	4000 W	6000 W	7000 W
Parallel Stacking	no	no	no	yes, up to 3
Synchronize with mains/generator	yes	yes	yes	yes
Output voltage	120V (50/60 Hz, configurable)		120V (50/60 Hz, configurable)	
Output waveform	pure sine	pure sine	pure sine	pure sine
Max. efficiency	93%	92%	90%	93%
Max. ripple on DC (battery at full load)	<15%	<15%	<15%	<15%
Battery no-load power consumption	≤30 W	≤30 W	≤30 W	≤30 W
Energy saving mode consumption	≤10 W	≤10 W	≤10 W	≤20W
General Specifications Battery Charger				
Input voltage range	90-140V	90–140V	90–140V	90–140V
Max. input current	9	16.5	25	32
Max. charge current at 104°F (40°C)	60A@14.25V	100A@14.25V	160A@14.25V	200A@14.25V
Battery temperature sensor	yes, included	yes, included	yes, included	yes, included
Battery voltage sense	yes, automatic	yes, automatic	yes, automatic	yes, automatic
Flat battery support (minimum charging)	yes, below 10V @ 25% power		yes, below 10V @ 25% power	
Continuous Battery Charge Output	60A DC	100A DC	160A DC	200A DC
Temp Range	-13°F to 140°F (-25°C to 60°C)		-13°F to 140°F (-25°C to 60°C)	
Specifications Transfer System				
AC input	30A (switched)	30A (switched)	30A (switched)	50A (switched)
AC output	40A	40A	40A	85A
AC input fuse	30A	30A	30A	50A
General Specifications				
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hwxwd	14.6" × 11.2" × 6.1" 371 × 284 × 155 mm	17.6" × 11.2" × 6.1" 448 × 284 × 155 mm	17.6" × 11.2" × 6.1" 448 × 284 × 155 mm	22" × 14.2" × 6.7" 559 × 361 × 170 mm
Weight	15.2 lb / 6.9 kg	20.5 lb/9.3 kg	20.5 lb / 9.3 kg	25 lb/11.3 kg
Approvals	ABYC A31, UL1236, UL1741, SAEJ1171, FCC class B		ABYC A31, UL1236, UL1741, SAEJ1171, FCC class B	
Technical Specifications				
Charge characteristic	IUoUo, automatic / 3-step+ for flooded, Gel/AGM, Lithium configurable			
Recommended battery capacity	~ 100–800 Ah (based on gel batteries, may differ for other types)		~ 200–1000 Ah (based on gel batteries, may differ for other types)	
Ground relay	yes, selectable	yes, selectable	yes, selectable	Yes, always on
Temperature range (ambient temp.)	-13°F to 140°F, derating 104°F (-25°C to 60°C, derating > 40°C)			
Cooling	Forced Air / Fan 80mm	Forced Air / Fan 80mm	Forced Air / Fan 80mm	Forced Air 92 or 120mm
Protection degree	IP23	IP23	IP23	IP23
Humidity protection	conformal coating, max. 95% relative humidity, non condensing			
Protections	over temperature, overload, short circuit, high/low battery voltage			
Power Assist	yes	yes	yes	yes
Power Sharing	yes	yes	yes	yes
Communciation	MasterBus, NMEA 2000® CZone® (config file needed for NMEA 2000®)			



CombiMaster 24/2000-60 35522000	CombiMaster 24/3000-70 35523000	CombiMaster 24/3500-100 35523500	CombiMaster 24/4500-120-HT 35524500	CombiMaster 48/5000-70-HT 35545000
24V (20.4–32V)	24V (20.4–32V)	24V (20.0–32V)	24V (20.0–32V)	48V (40–64V)
2000 W	3000 W	3500 W	4500 W	5000W
3000 W	4500 W	4500 W	6750 W	7500 W
4000 W	6000 W	7000 W	9000 W	10000 W
no	no	yes, up to 7	yes, up to 7	yes, up to 7
yes	yes	yes	yes	yes
120V (50/60 Hz, configurable)			120V (50/60 Hz, configurable)	
pure sine	pure sine	pure sine	pure sine	pure sine
92%	90%	93%	93%	93%
< 5%	< 5%	< 5%	< 5%	< 5%
≤30 W	≤30 W	≤30 W	≤ 47 W	≤ 57 W
≤10 W	≤10 W	≤20 W	≤ 25 W	≤ 30 W
90–140V	90–140V	90–140V	90–140V	90–140V
16.5	25	32	38 A Adjustable	45 A Adjustable
60A@28.5V	70A@28.5V	100A@28.5V	120A@28.5V	70A @ 57V
yes, included	yes, included	yes, included	yes, included	yes, included
yes, automatic	yes, automatic	yes, automatic	yes, automatic	yes, automatic
Yes, below 20V @ 25% power		Yes, below 20V @ 25% power		Yes, below 20V @ 25% power
60A DC	70A DC	100A DC	120A DC	70A DC
-13°F to 140°F (-25°C to 60°C)		-13°F to 140°F (-25°C to 60°C)		-13°F to 140°F (-25°C to 60°C)
30A (switched)	30A (switched)	50A (switched)	50A (switched)	50A (switched)
40A	40A	85A	85A	85A
30A	30A	50A	50A	50A
LED display	LED display	LED display	LED display	LED display
17.6" × 11.2" × 6.1"	17.6" × 11.2" × 6.1"	22" × 14.2" × 6.7"	22" × 14.2" × 6.7"	22" × 14.2" × 6.7"
448 × 284 × 155 mm	448 × 284 × 155 mm	559 × 361 × 170 mm	559 × 361 × 170 mm	559 × 361 × 170 mm
20.5 lb / 9.3 kg	20.5 lb / 9.3 kg	25 lb/11.3 kg	27 lb / 12.2 kg	27 lb / 12.2 kg
ABYC A31, UL1236, UL1741, SAEJ1171, FCC class B			ABYC A31, UL1236, UL1741, SAEJ1171, FCC class B	
IUoUo, automatic / 3-step+ for flooded, Gel/AGM, Lithium configurable				
~100–800 Ah (based on gel batteries, may differ for other types)	~140–1000 Ah (based on gel batteries, may differ for other types)	~ 200–1000 Ah (based on gel batteries, may differ for other types)		
yes, selectable	yes, selectable	Yes, always on	Yes, configurable through jumper	Yes, configurable through jumper
-13°F to 140°F, derating 104°F (-25°C to 60°C, derating > 40°C)				
Forced Air / Fan 80mm	Forced Air / Fan 80mm	Forced Air 92 or 120mm	Forced Air 92 or 120mm	Forced Air 92 or 120mm
IP23	IP23	IP23	IP23	IP23
conformal coating, max. 95% relative humidity, non condensing over temperature, overload, short circuit, high/low battery voltage				
yes	yes	yes	yes	yes
yes	yes	yes	yes	yes
MasterBus, NMEA 2000®, CZone (config file needed for NMEA 2000®)				

ChargePro™ Battery Chargers

These new onboard chargers have the same housing and mounting dimensions as our traditional ChargePro Guest chargers with a number of performance enhancements.

- For use with flooded, AGM, or Gel batteries
- Microprocessor controlled for accurate charging
- Universal input 120/230V for go-anywhere freedom
- Isolated outputs
- Outputs can be put in series or parallel for higher voltage or current
- Completely sealed, epoxy filled
- IP68 waterproof
- Designed for harsh marine and industrial environments – moisture, salt, shock and vibration tested
- Non corroding housing for ultimate reliability
- Meets global industry standards including UL, CSA, ABYC, DOE, FCC Class B, California efficiency regulations (CEC)
- Footprint and mounting holes are same as former ChargePro Guest Chargers



Total Amps	Outputs	Amps per out	Battery System	Input Voltage Range	Output Voltage	GUEST Old #	Part #
6	1	6	12V	120/230V 50/60 Hz	12V	2608A →	28106
10	2	5	12V+12V or 24V	120/230V 50/60 Hz	12V	2611A →	28210



NEMA 5-15P

For use with Group 24 through 34 Flooded and AGM batteries. Not for use with 4D or 8D large capacity batteries.



Certified to:
UL STD 1236
CSA C22.2 No. 107.2
FCC Class B

IP68 RoHS

Related Products

ConnectCharge™
Inlets
page 97



Portable Battery Chargers



	6 Amp Battery Charger	3 Amp Battery Charger
Part #	2606A-B	2603-B
Total Amps	6	3
Outputs	1	1
Amps per out	6	3
Battery System	12V	12V
Input Voltage	100-130V AC / 60Hz	100-130V AC/60Hz
Output Voltage	12V	12V
AC	6' AC cord with standard plug	18" AC cord with standard plug
Dimensions	5.5" x 5.0" x 2.4" 140x127x61 mm	3.10" x 3.50" x 2.34" 79x89x59 mm
Weight	3.5 lbs / 1.6 kg	1.0 lbs / 0.5 kg



RoHS

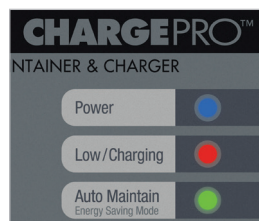
1.5 Amp ChargePro™ Maintainer

Keep your battery charged with this highly reliable, Guest 1.5 Amp maintainer. Extends battery life and will charge, monitor and re-charge your battery if the voltage drops below 12.9V. The maintainer can be safely connected to the battery for short or long periods of time. To increase versatility the maintainer comes with alligator clips and ring terminals for the output cable. This maintainer will charge smaller batteries and maintain batteries up to 150Ah (group 31).

- Ideal for sport fishing boats, ski boats, jet ski's, ATV's, automobiles, tractors, riding lawn mowers and more
- For Wet, Gel and AGM batteries
- Charge batteries 1.2 Ah to 40 Ah
- Maintain batteries 1.2Ah to 150 Ah
- Energy savings mode automatically shuts off the charger when the battery is charged. The charger periodically monitors the battery and turns back on when the battery falls below 12.9V.
- Maintainer can safely stay connected to the battery for long periods of time
- LED's let you know when the Power is ON, battery is being charged and when charging is complete.
- Includes ring terminals and alligator clips for connection to the battery
- Weather resistant, IP65
- 3-wire AC plug, NEMA 5-15P
- 3 year warranty
- Meets UL 1236 and CSA Standards, cETLus



Concealed Mounting



Expanded LED Status Center



Portable Foam Resting Pad



Included DC Cable Assemblies



NEMA 5-15P Plug

Part #	Output Volts	Output Amps	Banks	Cable Length	Size (WxHxD)	Weight	AC In
2701A	12V DC	1.5 Amps	1	6'	5.0"x5.8"x2.0"	2.3 lbs	120V AC 60Hz

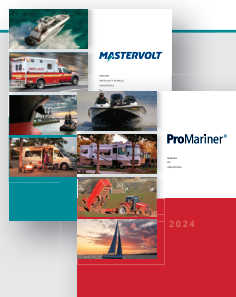


Conforms to:
Marine UL 1236 SB
CSA C22.2 No. 107.2
FCC Class A

Designed and
Constructed to:
ABYC A-31
ABYC
Setting Standards for Safer Boating

MASTERVOLT
ProMariner®

See our Mastervolt and ProMariner product catalogs for more battery charger options



CHARGEPRO™

Guest On-Board Battery Chargers

For 12, 24, 36 and 48 volt systems (model specific)

Guest on-board battery chargers have been redesigned from the inside out with the customer in mind. Our newest generation on-board marine and industrial-grade battery chargers include leading advancements in digital charging technology and waterproof design/construction. Designed to maximize individual battery performance, extend battery life and show battery status better than ever before.

Every Guest charger has a dedicated output that delivers the full amount of amps per bank. The easy to read graphics indicates the status of each battery bank through the charging process.

ChargePro's low profile flangeless extruded aluminum housing is sealed by gaskets with heavy duty end caps for 100% waterproof performance to IP67. This new construction design delivers an increase in charging and thermal management performance. The new ChargePro series is up to 40% lighter while increasing durability and ease of installation over prior generations of older technology epoxy filled plastic body chargers.

- All high frequency, digital charging technology
- Microprocessor and software control for precision, fully automatic 5-stage performance charging
- Fully automatic 5-stage performance charging
- Dedicated battery charging, sensing and control per bank
- Individual battery sensing and control
- Expanded LED charge status monitor
- Wiring and battery fault detection
- Auto-maintain energy saver mode
- Up to 40% lighter
- 100% Waterproof (IP67) and shock resistant for all fresh and saltwater applications
- All models are pre-wired for easy installation
- For all 12 volt flooded and AGM lead acid batteries
- Built-in safety: reverse polarity, over-current, over-voltage, over-temperature and ignition protection. In-line fuses for maximum DC wire protection.
- 2 year warranty



2713A



2711A



2708A



Expanded LED Display



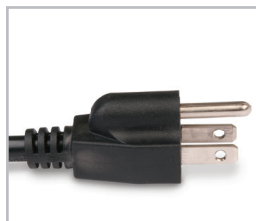
Battery fault detection LEDs



Heavy-Duty strain reliefs



In-line safety fuses



NEMA 5-15P Plug



Certified to:
UL STD 1236
CSA C22.2 No. 107.2
FCC Class B

IP67



Designed and
Constructed to:
ABYC-31



Guest ChargePro™ Series Selection

ChargePro 5A to 20A Models

						
Model	ChargePro 5	ChargePro 4/4	ChargePro 10	ChargePro 5/5	ChargePro 5/5/5	ChargePro 10/10
Part #	2708A	2707A	2710A	2711A	2713A	2720A
Input Volts	90-135V AC 50/60Hz	90-135V AC 50/60Hz	90-135V AC 50/60Hz	90-135V AC 50/60Hz	90-135V AC 50/60Hz	90-135V AC 50/60Hz
DC System Voltage	12	12/24	12	12/24	12/24/36	12/24
Banks	1	2	1	2	3	2
Amps	5	4/4	10	5/5	5/5/5	10/10
Amps Per Bank	5	4	10	5	5	10
AC and Cord Length	6'	6'	6'	6'	6'	6'
Size (W x H x L)	7.5" x 2.4" x 7.2"	7.5" x 2.4" x 9.0"	7.5" x 2.4" x 9.0"	7.5" x 2.4" x 9.0"	7.5" x 2.4" x 12.9"	7.5" x 2.4" x 12.9"
Weight (lbs)	3.2	4.5	4.2	4.7	6.7	6.6

ChargePro 30A and 40A Models

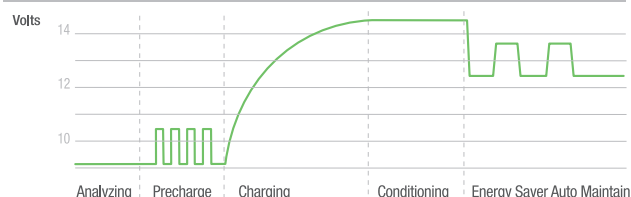
Designed for demanding 12, 24, 36 and 48 volt battery systems requiring 10 amps per battery for the fastest charge times.



Model	ChargePro 10/10/10	ChargePro 10/10/10/10
Part #	2731A	2740A
Input Volts	90-135V AC 50/60Hz	90-135V AC 50/60Hz
DC System Voltage	12/24/36	12/24/36/48
Banks	3	4
Amps	10/10/10	10/10/10/10
Amps Per Bank	10	10
AC and Cord Length	6'	6'
Size (W x H x L)	9.0" x 4.1" x 8.7"	9.0" x 4.1" x 8.7"
Weight (lbs)	8.0	8.5

Fully Automatic Multi-Stage Performance Charging Overview

Charge Profile



ChargePro's 5-Stage Performance Charging algorithm is fully automatic and designed to maximize battery performance and extend battery life.

Stage 1 - Analyze Mode: AC Power is applied. ChargePro's red Charging LED will flash indicating it is analyzing individual wiring connections for proper connection/polarity and that each battery is over 2.5 VDC and capable of accepting a precharge. When completed any errors will trip a battery specific red fault LED, or if no faults are present the red Charge LED will illuminate solid red.

Stage 2 - Precharge Mode: For batteries under 10 volts, this mode is designed to pulse the battery up to 10 volts before accepting full rated constant current (Stage3). During this mode the red charging LED will be illuminated with a solid on.

Stage 3 - Charging Mode Constant Current: During this mode the red charging LED will be illuminated with a solid on indicating each battery is being charge in constant current mode as controlled by temperature until the battery voltage is raised to a precise 14.6 volts DC and the red Charging LED will shut off.

Stage 4 - Conditioning Mode Constant Voltage: During this mode the amber Conditioning charging LED will be solid on indicating each battery is being conditioned at 14.6 volts for up to 3 hours until the battery is fully charged. Followed by the amber LED turning off while the charger enters into Stage 5.

Stage 5 - Storage Recondition Mode During this mode the blue AC Power and green Auto Maintain LED will be solid on indicating each battery is being monitored while the charger is in standby mode consuming little to no power until the battery drops under 12.8 volts (fully charged) and the charger will turn on and auto maintain the battery in a fully charged state. This is fully automatic and safe for short and long term storage.

Related Products



AC Plug Holder
page 95



Cable Extender
page 95

ProTechOne Digital Series

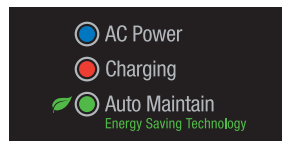
Fully Automatic On Board Battery Charger & Maintainer

ProMariner's new ProTechOne Fully Automatic On-Board Battery Charger and Maintainer utilizes the latest in microprocessor and software control charging and energy saving auto maintain technology. Safe for short and long term storage with multi-stage charging, conditioning and auto maintaining proven to maximize battery performance and life. Designed for weatherproof applications and years of trouble free use, ProTechOne boasts a gasketed molded case design for outdoor use with commercial grade jacketed AC and DC cables for maximum cable protection and durability.

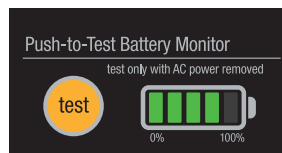
ProTechOne incorporates a push-to-test battery status monitor showing remaining battery power, in addition to fault detection of battery connections, reverse polarity or battery too low to charge. In the event of a fault, both the Charging and Auto Maintain LEDs will remain off.

An angled easy-to-view LED dashboard provides quick status of AC Power, Charge Mode and Auto Maintain (Energy Saver) mode, which controls the charging output as needed to maintain a fully charged battery, lowering AC consumption and reducing operating cost.

- All Digital Charging Technology
- Weatherproof Gasketed Rugged Plastic Molded Housing
- Fully Automatic Multi-stage Digital Charging
- Dedicated Battery Charging, Sensing and Control
- Push-to-test Battery Monitor LED Fuel Gauge Status
- Auto Maintain Energy Saver Mode
- Pre-wired Easy Installation
- For All 12 Volt Flooded (Lead Acid) & Gel Batteries
- Built-in Safety – Reverse Polarity, Ignition, Over-Current, Over-Voltage and Over-Temperature protection
- Waterproof DC Safety Fuse For Maximum DC Wire Protection
- Listed to UL 1236, CSA C22.2 No. 107.2, CEC & DOE
- Ignition Protected And FCC Class A for Quiet Operation and Non Radio Interference
- 2 Year Warranty



LED Charge Mode Indicator



Push-to-test Battery Monitor
LED Fuel Gauge Status



Waterproof DC Safety Fuse For
Maximum DC Wire Protection



Integrated AC Power Inlet with Cover
and Quick Mounting Indexing. (Model Specific).



Conforms to UL STD 1236
Certified to CSA STD. C22.2 No. 107.2
FCC Class A, CEC & DOE Listed

ProTechOne Series Selection



	Integrated AC Power Inlet with Self-closing Cover		AC Corded Model with 2.5' Power Cord	
Model	ProTechOne 4	ProTechOne 5	ProTechOne 4	ProTechOne 5
Part #	24104	24105	25104	25105
Amps	4	5	4	5
DC Voltage Systems	12	12	12	12
No. of Batteries	1	1	1	1
AC & DC Cable Length	2.5'	2.5'	2.5'	2.5'
Size	4" x 6.1" x 2.6"	4" x 6.1" x 2.6"	4" x 6.1" x 2.6"	4" x 6.1" x 2.6"
Weight	1.2 lbs	1.2 lbs	1.4 lbs	1.4 lbs
AC In	110-120 VAC, 50/60Hz		110-120 VAC, 50/60Hz	

Specifications subject to change without notice

ProTechOne's 3-Stage Digital Charging algorithm is fully automatic and designed to extend battery life.

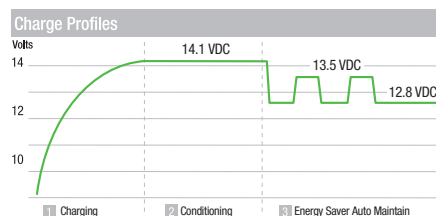
Stage 1 & 2 - Charge / Conditioning Mode

During this mode the red charge LED will be solid on indicating the battery is being charged in constant current mode as controlled by temperature until the battery voltage is raised to 14.1 VDC and will hold at 14.1 VDC in constant voltage mode for 2 to 3 hours to condition the battery. When completed, the red Charging LED will shut off.

Stage 3 - Energy Saver Auto Maintain Mode

During this mode the green Auto Maintain LED will be solid on indicating the battery is being monitored while the charger is in standby mode consuming little to no power until the battery drops under 12.8 VDC (fully charged) and the charger outputs will turn on and auto maintain the battery in a fully charged state. This is fully automatic and safe for short and long term storage.

3 Stage Performance Charging Overview



BLUE SEA
MASTERVOLT
ProMariner®

See our Blue Sea Systems, Mastervolt and ProMariner product catalogs for more battery charger options



Related Products



AC Plug Holder
page 95



Cable Extender
page 95

Universal AC Plug Holder+

Universal design for all standard 120V AC plugs

- Plug clamp insert included—converts plug holder to an AC inlet for ProMariner engineered chargers
- No cutting, stripping or rewiring of AC power cord
- Watertight and UV resistant cover
- Easy to reach safe AC power cord connections
- Stainless steel mounting screws included
- Easy installation
- Compatible with Guest ConnectCharge™ plug

Part # 150PHB Black

Part # 150PHW White

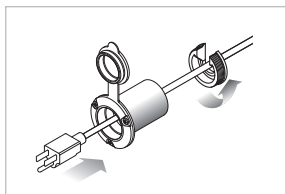


Plug Clamp Insert

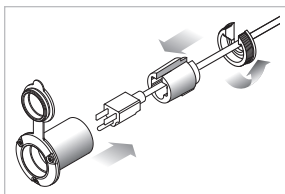


Available in black or white

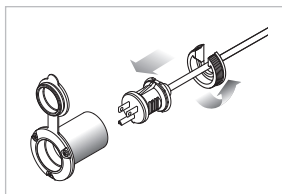
AC Plug Holder Configurations—Multi-Use Design



Universal Plug Holder
Fits marine chargers with 120V plugs.



With Plug Clamp Insert
For all ProMariner chargers, Bass Pro shops, Cabela's and Guest chargers.



ConnectCharge™ Plug
Guest and Marincor ConnectCharge plug



Charger DC Cable Extenders

Universal design for all marine chargers with ring terminal cables

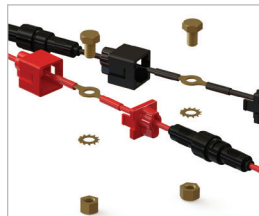
- Rated up to 30 amps
- Color coded for quick and easy installation
- No cutting, stripping or splicing required
- Slide & snap fully insulated connection covers
- Corrosion resistant tinned 12 AWG copper wire and gold plated hardware
- Dual inline waterproof fuses for maximum wire protection
- Available in 5 ft or 15 ft cable lengths
- Use with all on-board marine battery chargers when standard battery charger cables do not reach your bow, center mount or stern battery compartment locations

Part # 27505 5 ft

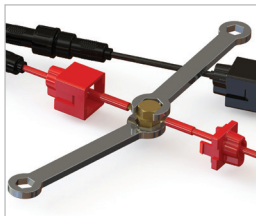
Part # 27515 15 ft



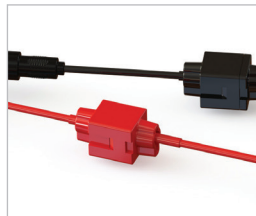
Easy to extend charger cables with two 1/2" wrenches



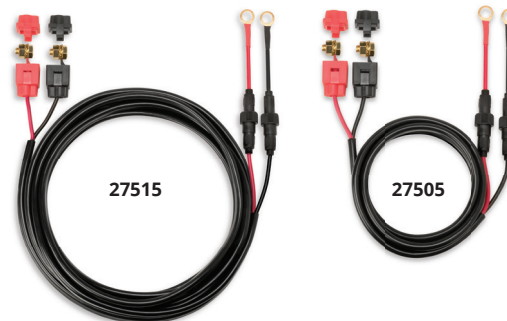
Step 1:
Align charger red and black wires and assemble hardware as shown



Step 2:
Tighten all hardware to approximately 12 ft. lbs.



Step 3:
Slide and snap connection cover





ConnectCharge™ Inlets



Universal Mount

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

Part # 150CCI



Rear Mount

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

OEM # 150CCTM.OEM



Front Mount

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

OEM # 150CC.OEM

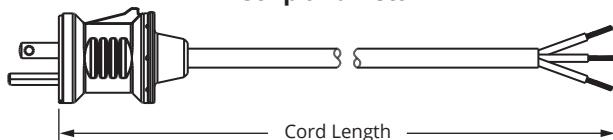
For use with
Battery chargers with
ConnectCharge™ Plug only!

Exclusive
molded notch on
plug locks into
ConnectCharge™ inlet

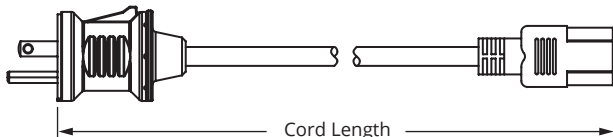


ConnectCharge™ Cords

Strip and Retain



IEC320 C15 Connector



14/3SJTW Cord Length	Amps	Voltage	Nema Config	Cord Termination	Part #
24"	15	125	 5-15P	Strip & Retain	152400-01
				IEC320 C15 Connector	152400-03
48"	15	125	 5-15P	Strip & Retain	154800-01
				IEC320 C15 Connector	154800-03
72"	15	125	 5-15P	Strip & Retain	157200-01
				IEC320 C15 Connector	157200-03

Hard Wired Charger Inlets

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

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



15A 125V
Straight Blade



20A 125V
Straight Blade

Universal Mount Switches

- Longer stud lengths for improved assembly and easier cable routing
- Built with heavy-duty copper sweep contacts to ensure positive circuit control
- Rugged internal components protected by a tough, impact resistant polycarbonate housing that is impervious to the elements
- Cable Lug Size: 3/8"
- Dimensions: 5.0" x 2.75"



Selector Switch w/out AFD

Continuous amps: 230
Momentary amps: 345



Part # 2111A
Part # 2111A-O orange
Part # 2111A-17 red
OEM # 2111A-B black

Selector Switch with AFD

Continuous amps: 230
Momentary amps: 345



Part # 2110A
OEM # 2110A-B black

On/Off Switch w/out AFD

Continuous amps: 230
Momentary amps: 345



Part # 2112A
OEM # 2112A-B black

Battery Selector Switches

- Polycarbonate case
- For 6V, 12V, 24V or 36V systems
- Surface mount
- Cable Lug Size: 3/8"
- Dimensions: 5.50" x 2.63"



Selector Switch with AFD

Continuous amps: 230
Momentary amps: 345



Part # 2100
OEM # 2100-B

Selector Switch w/out AFD

Continuous amps: 230
Momentary amps: 345



Part # 2101
OEM # 2101-B

On/Off Switch w/out AFD

Continuous amps: 230
Momentary amps: 345



Part # 2102
OEM # 2102-B

Heavy-duty Diesel Power Battery Switches

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



Heavy-duty On/Off Switch

Continuous amps: 450
Momentary amps: 800



Part # 2303A
OEM # 2303A-B

Extra-duty On/Off Switch

Continuous amps: 600
Momentary amps: 1000



Part # 2304A
OEM # 2304A-B

Battery Selector Switch

Continuous amps: 360
Momentary amps: 600



Part # 2300A
OEM # 2300A-B

HD-Series Battery Switches

Up to 600A continuous rating for large diesel engines

- Tin-plated copper studs for maximum conductivity and corrosion resistance
- Accepts up to 4/0 AWG (120 mm²) battery cables
- Studs accept 1/2" (M12) ring terminals
- 7/8" (22 mm) stud length accepts multiple cable terminals
- Blue Sea Systems one-piece terminal stud design never loosens over time
- One-piece stainless flange nuts ensure safe and secure connections
- Fits most Perko and Guest low amperage battery switch hole patterns
- Case design allows surface or rear mounting options
- Tactile indicator conveys knob position by feel
- Icon Circuit Identification Label Kit available 7902 - sold separately (p. 158)

Part #	3000, 3001	3002, 3003, 11003
Cranking Rating: 30 sec.	1,750A	1,600A
Intermittent Rating: 5 min.	900A	700A
Continuous Rating	600A	500A
Voltage Max. Operating	32V DC	32V DC
Regulatory	CE marked, ISO 8846, UL Listed – UL 1107 electric power switches, Meets American Boat and Yacht Council (ABYC) requirements, Meets UL 1500 and SAE J1171 external ignition protection requirements IP66 – protected against powerful water jets (see inside back cover)	

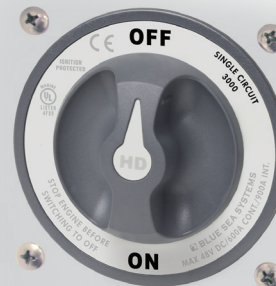
**IGNITION
PROTECTED**

Part #	Description	AFD*
3000	Single Circuit ON-OFF	--
3001	Single Circuit ON-OFF	Yes
3002	Selector 4 Position	--
3003	Selector 4 Position	Yes
11003	Selector 3 Position	Yes

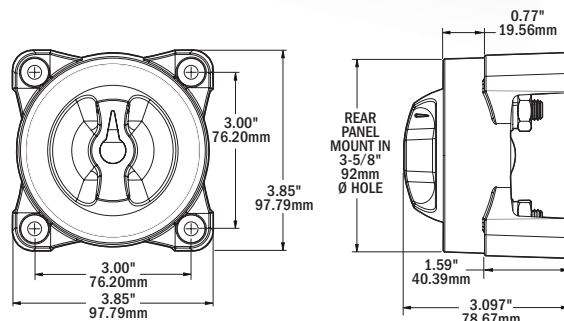
* Alternator Field Disconnect (AFD) feature protects the diodes in the alternator in the event of the switch being switched to the OFF position while the engine is running. If the AFD is not used to protect the alternator, an LED can be connected to the AFD terminals to indicate when the battery switch is in any position but OFF.

Mounting Options

Rear



Front



Single Circuit ON-OFF

Switches a single battery to a single load group



3000, 3001*



3000



3001

Selector 4 Position

Switches isolated battery banks to all loads or combines battery banks to all loads



3002, 3003*



3002



3003

Selector 3 Position

Switches isolated battery banks to all loads



11003*



11003

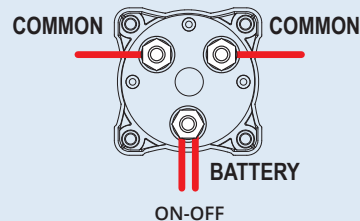
TECH TIP

HD-Series Connections

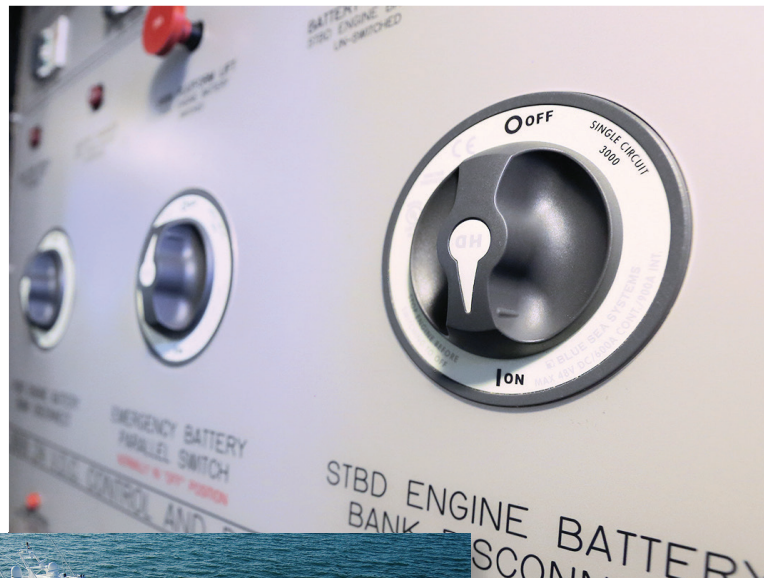
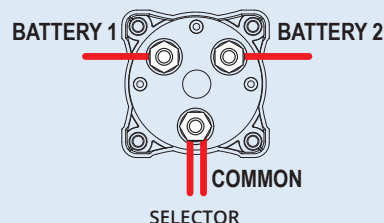
3000 and 3001 HD-Series ON-OFF battery switches have **three studs**; one stud for the battery connections and two studs for the common load terminations.

3002 and 3003 HD-Series Selector battery switches also have **three studs**; but the configuration is different with one stud for Battery 1, one stud for Battery 2, and one stud for the common load terminations.

3000 and 3001 Connections



3002, 3003, and 11003 Connections



SeaForce IX builds custom sport fishing and cruising yachts which rely on Blue Sea Systems HD Heavy Duty Battery Switches for battery management in the engine room.

Battery Switches



701

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.



701S

Battery Selector Switch

The 701S is the most compact selector switch available on the market. Housed in the same dimensions as the 701, and includes the same removable side plates and back cover 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.



700

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.



720

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.
- Can be locked with padlock for safely isolating circuits.



721

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.

POWER TIP

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.

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

Part #	OEM #	LxWxH in	LxWxH mm	Cont.	Inter. (5 min)	Crank. (10 sec)	Voltage	Operation	Studs	Cable to meet rating (AWG/mm ²)
700	700B	2.7" x 2.7" x 4.3"	68 x 68 x 110 mm	275A	455A	1250A	48V DC	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	275A	455A	1250A	48V DC	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	200A	300A	1000A	48V DC	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	600A	800A	2500A	48V DC	On/Off	2x 1/2" (12mm)	2x 3/0 / 2x 95mm ²
720-DP	720-DP/B	4" x 4" x 3.5"	102 x 102 x 90 mm	400A	525A	1500A	48V DC	On/Off/DP	2x 1/2" (12mm)	2x 3/0 / 2x 95mm ²
721	721B	4" x 4" x 3.5"	102 x 102 x 90 mm	350A	500A	1500A	48V DC	1-2-Both-Off	2x 1/2" (12mm)	2x 2/0 / 2x 95mm ²

L-Series Solenoid Switches

150A or 250A switches are remotely activated using a low amp switch and smaller gauge wire

- Continuous duty, SPST - Normally Open
- Hermetically sealed contacts
- Activated by a remote ON-OFF switch 8230 - sold separately (p. 92)
- Coil control circuit minimizes heating and amperage draw

Part #	7765	9012
Description	150A L-Series Solenoid Switch	250A L-Series Solenoid Switch
Operating Temperature	-40°C to +85°C	-55°C to +85°C
Coil Circuit Connection	22 AWG Tinned Wire	20 AWG Tinned Wire
Voltage Nominal	12/24V DC	12/24V DC
Coil Function	Normally Open	Normally Open
Operating Current Changing State	3.8A	3.6A
Operating Current Continuous	0.13A @ 12V, 0.07A @ 24V	0.13A @ 12V, 0.07A @ 24V
Voltage Input	9V-36V DC	9V-36V DC
Terminal Studs	M8 (accepts 5/16" terminals)	M8 (accepts 5/16" terminals)
Terminal Stud Torque	90 in-lb (10 Nm) max.	90 in-lb (10 Nm) max.
Mounting Screws	#10 or M5	#10 or M5
Mounting Screw Torque	15-30 in-lb (1.7-3.4 Nm)	15-35 in-lb (1.7-4 Nm)
Weight	0.95 lb (0.43 kg)	0.9 lb (0.41 kg)
Contact Rating		
Continuous Rating	150A*	250A**
Intermittent Rating (5 min.)	225A*	275A**
Cranking Rating (30 sec.)	600A*	1000A**
Voltage Maximum	320V DC	800V DC

*2 AWG Cable in 50°C ambient

**1/0 AWG Cable in 50°C ambient

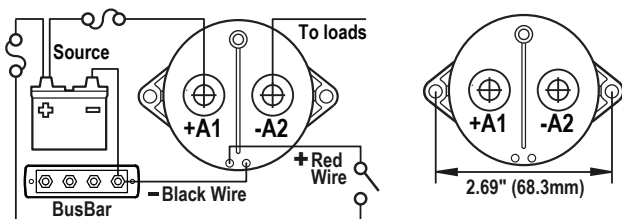
Regulatory CE marked, IP67-protected against immersion up to 1 meter for 30 minutes (see inside back cover)
Ignition protected - ISO 8846 and SAE J1171.
9012 ONLY - UL Certified - UL 508 Industrial Control Equipment

**IGNITION
PROTECTED**

9012 Wire Size and Current Ratings (50°C Ambient)

Wire Size	Cranking 30 sec.	Intermittent 5 min.	Continuous
1/0 AWG	1000A	275A	250A
2/0 AWG (70 mm²)	1000A	400A	300A

For the full list of specifications see page 52



Related Product



7765



9012

TECH TIP

Solenoid vs Remote Battery Switch

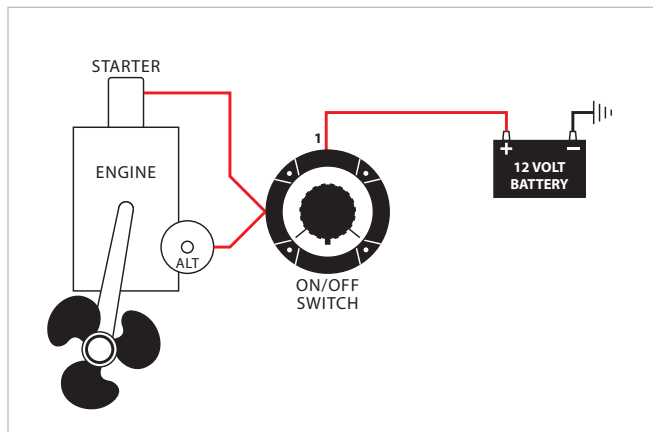
Solenoid: An electronic switch with no manual control, for circuits where a manual battery disconnect is offered elsewhere in the circuit.

Remote Battery Switch: A solenoid or relay with a manual control switch allowing for switching if control circuit is compromised and for service lockout.



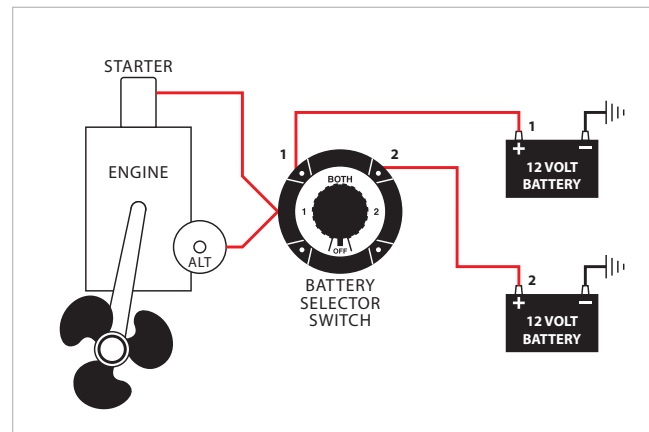
Battery Switch Operation Diagrams

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



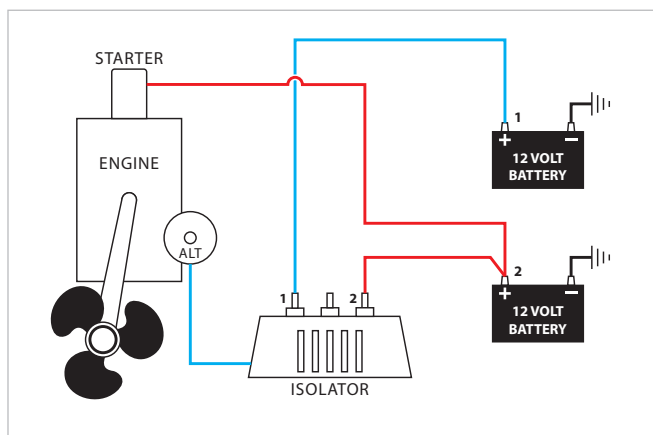
Single battery

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



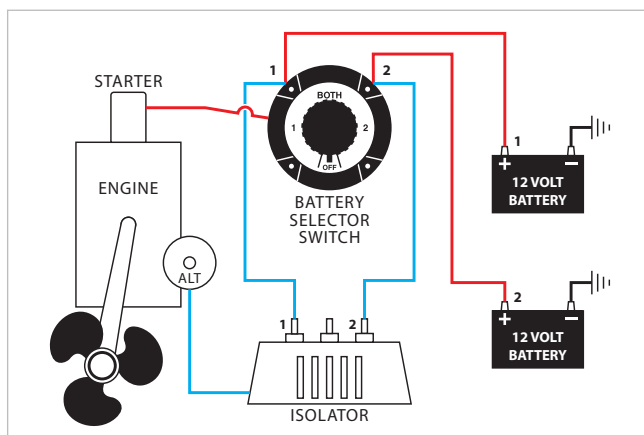
Two battery with out isolator

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



Two battery with isolator

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



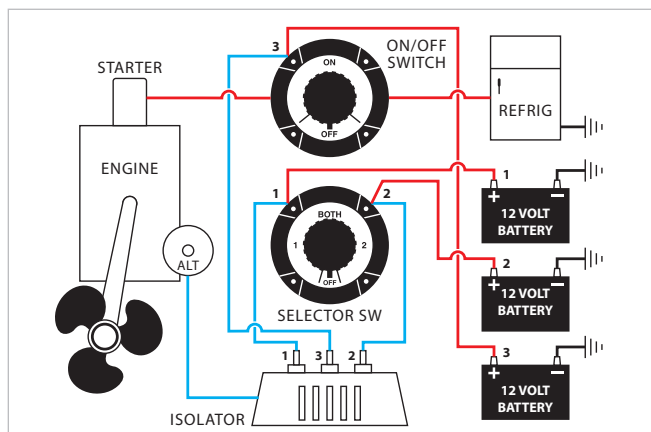
Two battery with emergency parallel

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



See our BEP and Blue Sea System product catalogs for more battery switch options



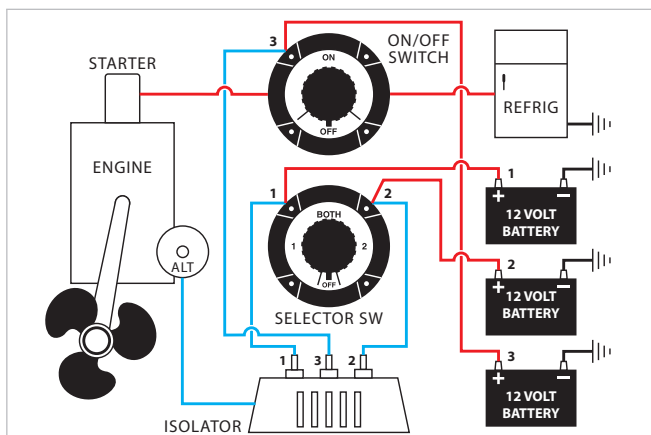


One battery selector switch, one On/Off selector switch automatic battery isolation and automatically charges three batteries

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

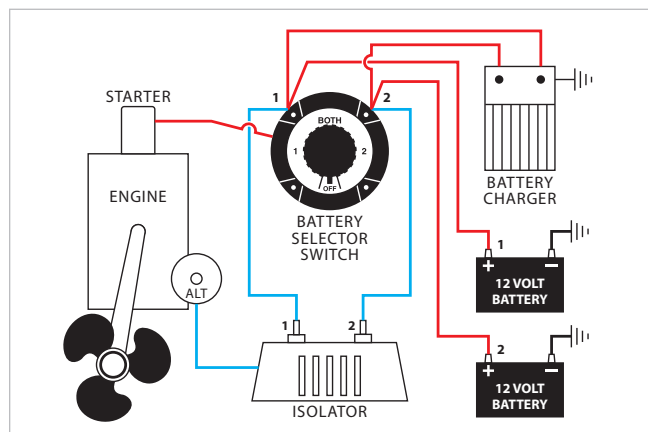
Switch selector usage:

1. Master disconnect
2. Emergency parallel function



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

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



Adding automatic battery charger/converters to system

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

TECH tip™

Alternator Field Disconnect (AFD)

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

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

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



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



DC DEVICES

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

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



DC DEVICES

Dual USB Chargers & Receptacles	109
ConnectPro® Plugs & Receptacles	111
3-Wire 70A Charging/Trolling System	113
ConnectTite™ Plugs & Receptacles	114
ConnectTite™ Accessories	114



Marinco DC devices are a popular option on powered equipment such as ATV's, tractors, and golf carts/vehicles. USB devices are growing in popularity as well for charging phones, tablets, and notebook computers.

SeaLink® Dual USB Charger & Receptacle

Dual USB charger, and combination Dual USB with 12V Receptacle. An expansion of the durable SeaLink 12V product line, the combination Dual USB features two ports to charge cell phones, tablets and other devices powered by USB's, a blue LED to show that power is available, and a cover to prevent water and dirt from entering the ports. The Dual USB has a 12 to 24 Volt input with a 5 Volt output, a total of 2.1 amps output between the two ports. The 12V receptacle included in the combination SeaLink USB charger, is rated to 20 amps, and is compatible with 12V plugs. A no LED version is also available and allows only 3.2 mA's compared to the 10 mA versions with the LED. These products are ideal for your USB charging needs and designed for longevity in harsh environments.



12VCOMBO



12VDUSB

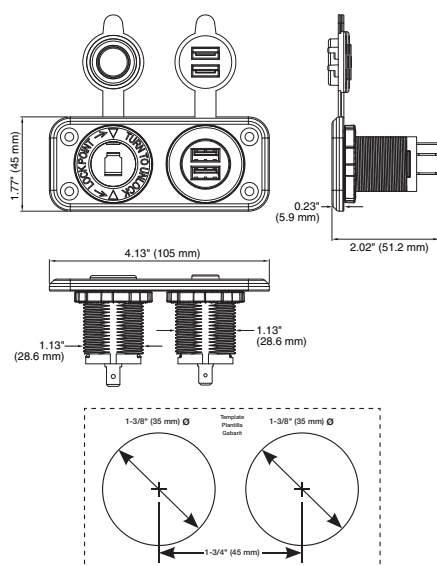


12VDUSBAC

Dual USB Charger & 12V Receptacle

- 12V DC input
- Dual USB has 5V, 2.1 amp total output
- LED power indicator light for USB
- Receptacle has 12V DC output, rated up to 20 amps
- Water resistant covers protects against dust and water
- Insulated terminals included

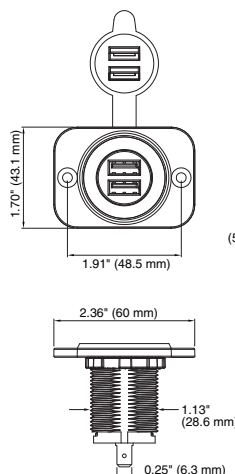
Part # 12VCOMBO black
 OEM # 12VCOMBO-B black
 OEM # 12VCOMBOW-B white
 OEM # 12VCOMBON-B black, no LED



Dual USB Charger Receptacle

- 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
- Insulated terminals included

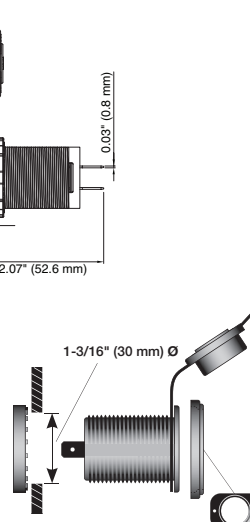
Part # 12VDUSB black
 OEM # 12VDUSB-B black
 OEM # 12VDUSBW-B white
 OEM # 12VDUSBN-B black, no LED
 OEM # 12VDUSBNP.OEM black, no mounting plate
 OEM # 12VDUSBNPL.OEM black, no LED, no mounting plate



Dual USB-A/C Charger

- Two USB Ports: (1) USB-A and (1) USB-C
- Mounts in a 1 1/8" hole
- Water resistant cap
- LED power indicator
- Insulated terminals included

Part # 12VDUSBAC black
 OEM # 12VDUSBAC-B black



12/24V Dual USB 4.8A Chargers

Intelligent device recognition maximizes charge rate for phones, tablets, or other mobile devices

- Charges at the speed required by specific devices
- Internal filtering for reduced electronic interference
- Over temperature protection
- Conformal coated circuit board for the harsh marine environment
- Protective dust cap keeps debris and moisture out
- 1039 Mounts in an existing contura switch aperture
- 1045 Mounts in a common 1-1/8" hole

Maximum Output Current	4.8A DC (total)
Input Voltage	9V-32V DC
Output Voltage	5V DC $\pm 5\%$
Port Configuration	Intelligent Device Recognition
Parasitic Current Draw	1mA
Thermal Overload Protection	Yes
Short Circuit Protection	Yes
Reverse Polarity Protection	Yes
USB	2.0, Type A
Cutout Dimensions	1039 - 1.45" $\times$ 0.83" (36.83 $\times$ 21.08 mm)
	1045 - 1-1/8" (29 mm) diameter

Regulatory

RoHS, CE certified

RoHS **CE**

Part # 1039 Contura Switch Mount Charger

Part # 1045 Socket Mount Charger,



1039



1045

48V Dual USB 4A Chargers

Intelligent device recognition maximizes charge rate for phones, tablets, or other mobile devices

- Ideal for golf carts and other 48V systems
- Spring-hinged cover keeps debris and moisture out
- Charges at the speed required by specific devices
- Internal filtering for reduced electronic interference
- Over temperature protection
- Conformal coated circuit board for the harsh marine environment
- 1038 Mounts in an existing contura switch aperture
- 1046 Mounts in a common 1-1/8" hole

Maximum Output Current	4A DC (total)
Input Voltage	32V-64V DC
Output Voltage	5V DC $\pm 5\%$
Port Configuration	Intelligent Device Recognition
Parasitic Current Draw	1mA
Thermal Overload Protection	Yes
Short Circuit Protection	Yes
Reverse Polarity Protection	Yes
USB	2.0, Type A
Cutout Dimensions	1038 - 1.45" $\times$ 0.83" (36.83 $\times$ 21.08 mm)
	1046 - 1-1/8" (29 mm) diameter



1038



1046

RoHS **CE**

Part # 1038 Contura Switch Mount Charger

Part # 1046 Socket Mount Charger,

Part # 1035 Spring-hinged cover for 1038 & 1039

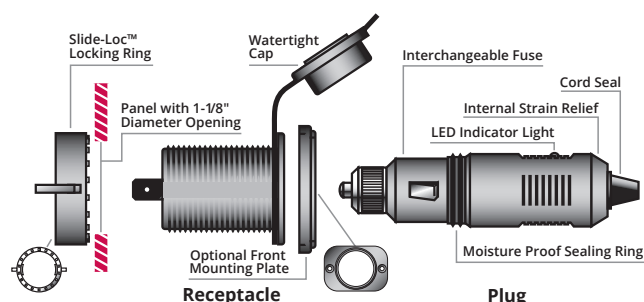
Part # 1036 Spring-hinged cover for 1046 & 1045

Plugs & Receptacles

Delivers More Power to Equipment

- Premium-quality DC Plugs & Receptacles
- Expanded product life and superior electrical conductivity for accessories
- Patented locking blades and a large contact area which reduces the temperature of the devices
- Leaf-spring contacts give longer life when repeated disconnects are required
- ConnectPro connections are weather resistant and corrosion resistant
- Suitable for on and off road vehicles in construction, farming, industrial or utility applications
- All electrical components are plated brass
- The receptacle fits into a standard 1-1/8" diameter mounting hole
- Accepts 2- or 3-wire configurations, up to 8 gauge
- With the 12VBRAD adapter, it can accept up to 6 gauge wire
- Receptacle is easy to install using the supplied mounting plate for front panel installation
- Optional locking-ring for rear access installation

ConnectPro® Charging & Trolling



ConnectPro system has superior electric current carrying capacity. It features locking plug and receptacle with spring clamping connections which provide a secure electrical contact.

2-Wire ConnectPro® Charging or Accessory

5 YEAR WARRANTY



Receptacle

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

Part # 12VBR52
OEM # 12VBR52.OEM



Plug

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

Part # 12VBPS2
OEM # 12VBPS2.OEM



Receptacle & Plug

- 12VBR52 and 12VBPS2 packaged together

Part # 12VCPS2



Dimensional drawings on page 112

3-Wire ConnectPro® Charging / Trolling System



PATENTED

Receptacle

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

Part # 12VBR
OEM # 12VBR.OEM

Mounting plate not included with 12VBR.OEM



Dimensional drawings on page 112



Plug

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

Part # 12VBP
OEM # 12VBP.OEM



Receptacle & Plug

- 12VBR and 12VBP packaged together

Part # 12VCP



6 Gauge Wire Receptacle Adapter

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

Part # 12VBRAD
OEM # 12VBRAD.OEM



Receptacle, Plug & 6 Gauge Adapter

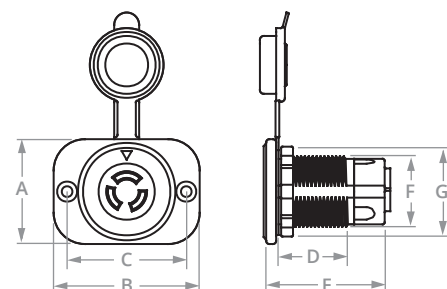
- 12VBR and 12VBP and 12VBRAD packaged together
- Max rating is 40 amps

Part # 12VCP6

Dimensions

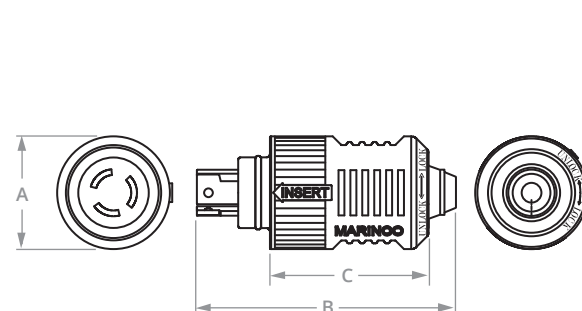
12VBR & 12VBR52

A	B	C	D	E	F	G
1.68"	2.34"	1.91"	1.11"	1.90"	1.12"	1.44"



12VBPS & 12VBPS2

A	B	C
1.42"	3.30"	2.00"



3-Wire 70A Charging / Trolling System



70A Trolling Motor Receptacle

- 70A continuous rating
- Universal design for 2 or 3-wire configuration 12V, 24V, 12/24V, 24/36V, 36V or 48V systems
- Floating pin design for maximum connectivity and durability
- Corrosion resistant, plated brass electrical components
- Watertight sealing cap
- Accepts up to 6 AWG wire

Part # 12VBRS3

OEM # 12VBRS3.OEM



70A Trolling Motor Plug

- 70A continuous rating
- Universal design for 2 or 3-wire configuration 12V, 24V, 12/24V, 24/36V, 36V or 48V systems
- Floating pin design for maximum connectivity and durability
- Corrosion resistant, plated brass electrical components
- Integrated strain relief
- Keyed design with thumbprint locator
- Accepts up to 6 AWG wire

Part # 12VBPS3

OEM # 12VBPS3.OEM



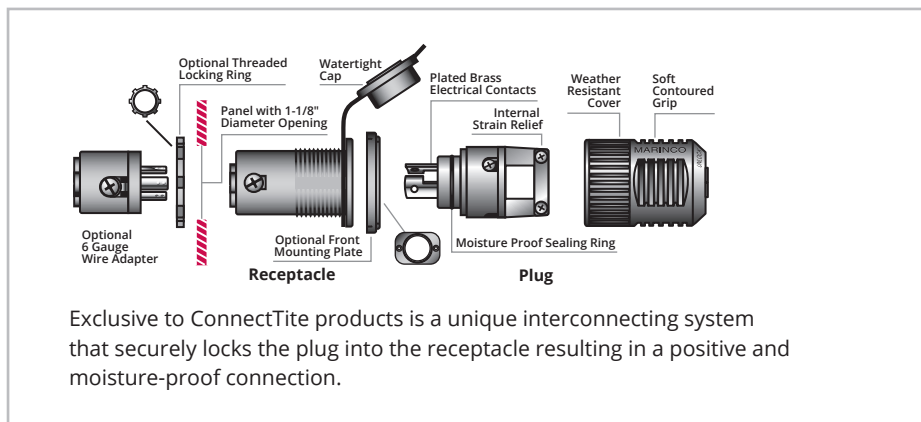
70A Trolling Motor Plug & Receptacle

- 12VBRS3 and 12VBPS3 packaged together

Part # 12VCP3



ConnectTite™ 12V Receptacles / Plugs / Accessories



12 Volt Receptacle w/ Old Style Ring

- Watertight sealing cap
- Easy to install, with locking ring for rear access installation
- Compatible with standard 12V plugs

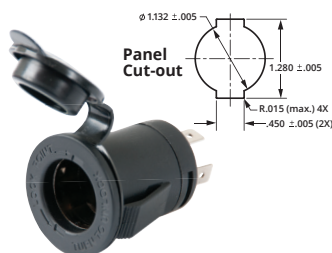
OEM # 12VRCO



12 Volt Receptacle

- Watertight sealing cap
- Easy to install, use supplied mounting plate (Not included with 12VRC.OEM) for front panel installation, or Slide-Loc™ for rear access installation

Part # 12VRC
OEM # 12VRC.OEM



12 Volt Snap-in Receptacle

- Easy to install, no locking rings needed
- Snap in design eliminates turning or twisting when inserting or removing plug
- Fits a wide variety of panel thicknesses
- Tabs mate with standard Packard terminals and connector bodies
- Fits standard hole pattern

OEM # 12VRCSP.OEM



Specification-Grade 6' 12V Extension Cord

- 6' of super flexible 18 gauge cable
- Receptacle is fully-enclosed in soft PVC with a watertight sealing cap
- Plug features an LED indicator light, moisture-proof sealing ring, strain relief and built-in 10A fuse
- 10A rated, 10A fused

Part # 12VXT



Specification-Grade Dual Outlet Extension Cord

- Dual outlets, each on its own one foot super flexible 18 gauge cable
- Receptacle is fully-enclosed in soft PVC with a watertight sealing cap
- Plug features an LED indicator light, moisture-proof sealing ring, strain relief and built-in 10A fuse
- 10A rated, 10A fused

Part # 12VAD



12 Volt Plug

- Moisture-proof sealing ring
- Green LED power indicator light
- Interchangeable 10 amp fuse
- Internal strain relief and cord seal
- Glass-filled nylon housing
- Current-carrying parts and knurl nut are nickel-plated copper alloy
- Compatible with standard 12V receptacle
- Max rating is 10 amps

Part # 12VPG
OEM # 12VPG.OEM



Mounting Plate

- Easy to install or retrofit
- Use with 12VRC.OEM, 12VRCO or 12VBR.OEM

OEM # 12MP.OEM



Receptacle Mounting Bracket

- Bracket mounts under the panel or on any flat surface for simple OEM installation or retrofit
- 2" wide x 2.5" tall
- Mounting screws included
- Easy to install or retrofit
- Use with 12VRC.OEM, 12VRCO or 12VBR.OEM

Part # 12BKT



Boot

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

Part # 300275

Wiring Devices Cross Reference

Eaton Cooper Crouse-Hinds	Leviton	Hubbell	Marinco
CS6360EX	CS63-60C	CS6360C	CS6360N
CS6361EX	CS63-61C	CS6361C	CS6361N
CS6364EX	CS63-64C	CS6364C	CS6364N
CS6365EX	CS63-65C	CS6365C	CS6365N
CS6369	CS63-69	CS6369	CS6369
CS6370	CS63-70	CS6370	CS6370
CS6375	CS63-75	CS6375	CS6375
CS6376	—	—	CS6375FL
CS8164EX	CS81-64C	CS8164C	CS8164N
CS8165EX	CS81-65C	CS8165C	CS8165N
CS8169	CS81-69	CS8169	CS8169
CS8175	CS81-75	CS8175	CS8175
CS8264EX	CS82-64C	CS8264C	CS8264N
CS8265EX	CS82-65C	CS8265C	CS8265N
CS8269	CS82-69	CS8269	CS8269
CS8275	CS82-75	CS8275	CS8275
CS8364EX	CS83-64C	CS8364C	CS8364N
CS8365EX	CS83-65C	CS8365C	CS8365N
CS8369	CS83-69	CS8369	CS8369
CS8375	CS83-75	CS8375	CS8375
CS8464EX	CS84-64C	CS8464C	CS8464N
CS8465EX	CS84-65C	CS8465C	CS8465N
CS8469	CS84-69	CS8469	CS8469
WP1	WP1	WP1	WP1
—	—	—	15RA
—	—	—	103RN
—	—	—	110R
—	—	—	152AY
—	—	—	153AY
—	—	—	157AY
CWL520C	2313	HBL2313	205C
CWL520CBK	2313-B	HBL2313BK	205CBL
—	—	—	205CL
CWL520FI	2315	HBL2315	205FI
CWL520FO	2316	HBL2316	205FO
CWL520P	2311	HBL2311	205P
CWL520PBK	2311-B	HBL2311BK	205PBL
—	—	—	205PL
CWL520R	2310	HBL2310	205R
IGL520R	2310-IG	IG2310	205RIG
CWL620C	2323	HBL2323	206C
—	2323-B	HBL2323BK	206CBL
CWL620FI	2325	HBL2325	206FI
CWL620FO	2326	HBL2326	206FO
CWL620P	2321	HBL2321	206P
—	2321-B	HBL2321BK	206PBL
CWL620R	2320	HBL2320	206R
IGL620R	2320-IG	IG2320	206RIG
CWL720P	2331	HBL2331	207P
CWL1420C	2413	HBL2413	2014C
CWL1420FI	2415	HBL2415	2014FI
CWL1420FO	2416	HBL2416	2014FO
CWL1420P	2411	HBL2411	2014P
CWL1420R	2410	HBL2410	2014R
CWL1520C	2423	HBL2423	2015C

Eaton Cooper Crouse-Hinds	Leviton	Hubbell	Marinco
CWL1520FI	2425	HBL2425	2015FI
CWL1520FO	2426	HBL2426	2015FO
CWL1520P	2421	HBL2421	2015P
CWL1520R	2420	HBL2420	2015R
CWL1620C	2433	HBL2433	2016C
CWL1620P	2431	HBL2431	2016P
CWL1620R	2430	HBL2430	2016R
CWL2120C	2513	HBL2513	2021C
CWL2120FO	2516	HBL2516	2021FO
CWL2120P	2511	HBL2511	2021P
CWL2120R	2510	HBL2510	2021R
—	—	—	2030FL
CWL530C	2613	HBL2613	305C
CWL530FI	2615	HBL2615	305FI
CWL530FO	2616	HBL2616	305FO
CWL630P	2621	HBL2621	306P
CWL530R	2610	HBL2610	305R
IGL530R	2610-IG	IG2610	305RIG
—	—	—	320IEC13
—	—	—	320IEC15
—	—	H320C	320IEC19
CWL1430C	2713	HBL2713	3014C
CWL1430FI	2715	HBL2715	3014FI
CWL1430FO	2716	HBL2716	3014FO
CWL1430P	2711	HBL2711	3014P
CWL1430R	2710	HBL2710	3014R
CWL1530C	2723	HBL2723	3015C
CWL1530FI	2725	HBL2725	3015FI
CWL1530FO	2726	HBL2726	3015FO
CWL1530P	2721	HBL2721	3015P
CWL1530R	2720	HBL2720	3015R
CWL1630C	2733	HBL2733	3016C
CWL1630FO	2736	HBL2736	3016FO
CWL1630P	2731	HBL2731	3016P
CWL1630R	2730	HBL2730	3016R
CWL2130C	2813	HBL2813	3021C
CWL2130FO	2816	HBL2816	3021FO
CWL2130P	2811	HBL2811	3021P
CWL2130R	2810	HBL2810	3021R
3762EX	3762-C	HBL3762C	3762N
3763EX	3763-C	HBL3763C	3763N
3764EX	3764-C	HBL3764C	3764N
3765EX	3765-C	HBL3765C	3765N
3769	3769	HBL3769	3769
3771	3771	HBL3771	3771
3775	3775	HBL3775	3775
3777	3777	HBL3777	3777
6580	4550	HBL4550	4550
CWL615R	4560	HBL4560	4560
CWL615P	4570-C	HBL4570C	4570
CWL615C	4579-C	HBL4579C	4579
CWL615FO	4585-C	HBL4585C	4585
CWL615FI	4586-C	HBL4586C	4586
4700	4700	HBL4700	4700
CR4700	—	HBL47CM00	4700CR

Chart is for reference only. User is responsible to verify form, fit and function with actual application.

Wiring Devices Cross Reference (cont)

Eaton Cooper Crouse-Hinds	Leviton	Hubbell	Marinco
CWL515R	4710	HBL4710	4710
CWL515FO	4715-C	HBL4715C	4715
CWL515FI	4716-C	HBL4716C	4716
CWL515P	4720-C	HBL4720C	4720
—	4720-CB	HBL4720CBK	4720BL
—	—	—	4720L
CWL515C	4729-C	HBL4729C	4729
-	4729-CB	HBL4729CBK	4729BL
—	—	—	4729L
CWL715R	4760	HBL4760	4760
CWL715P	4770-C	HBL4770C	4770
CWL715C	4779-C	HBL4779C	4779
CWL715FO	4785-C	HBL4785C	4785
CWL715FI	4786-C	HBL4786C	4786
—	510-R	—	510R
AH5262	5262	HBL5262	5252
—	52CM-62	HBL52CM62	5262CRR
6266	5266-C	HBL5266C	5266
6266BLK	5266-CB	HBL5266EBK	5266BL
—	52CM-66C	HBL52CM66C	5266CRS
—	—	—	5266L
6265	5266-CA	HBL5266CA	5266RA
6269	5269-C	HBL5269C	5269
6269BLK	5269-CB	HBL5269EBK	5269BL
—	52CM-69C	HBL52CM69C	5269CR
—	—	—	5269L
5278C	5278-C	HBL5278C	5278
—	—	—	5278BL
—	—	—	5278DRI
5279C	5279-C	HBL5279C	5279
—	—	—	5279BL
—	—	—	5279DRO
AH5362	5362	HBL5362	5352
6766	5366-C	HBL5366C	5366
6769	5369-C	HBL5369C	5369
—	53CM-69C	HBL53CM69C	5369CR
5778C	15378-C	HBL5378C	5378
5779C	15379-C	HBL5379C	5379
5462	—	—	5462
6866	5466-C	HBL5466C	5466
6869	5469-C	HBL5469C	5469
5878C	5478-C	HBL5478C	5478
5879C	5479-C	HBL5479C	5479
6666	5666-C	HBL5666C	5666
6669	5669-C	HBL5669C	5669
5678C	15678-C	HBL5678C	5678
—	—	—	5678DRI
5679C	15679-C	HBL5679C	5679
—	6017	HBL6017	6017
BS1	6017-Y	HBL60CM17	—
—	6018	HBL6018	6018
BS2	6018-Y	HBL60CM18	—
63CR60EX	6360-CR	—	6360CRN
63CR61EX	6361-CR	—	6361CRN
63CR64EX	6364-CR	—	6364CRN

Eaton Cooper Crouse-Hinds	Leviton	Hubbell	Marinco
63CR65EX	6365-CR	—	6365CRN
7413C	7411-C	HBL7411C	7411C
7411C	7413-C	HBL7413C	7413C
77CR15	7715-CR	HBL77CM15	7715CRN
7717	7717-CR	HBL7717C	7717N
7764EX	7764-C	HBL7764C	7764N
7765EX	7765-C	HBL7765C	7765N
7958	—	HBL7958	7958
6266HG	8215-C	HBL8215C	8215
6266HGC	8215-CT	HBL8215CT	8215T
—	8215-PLC	—	8215TL
6265HGC	8215-CAT	HBL8215CAT	8215TRA
6269HG	8219-C	HBL8219C	8219
6269HGC	8219-CT	HBL8219CT	8219T
—	8219-PLC	—	8219TL
9965C	9965-C	HBL9965C	9965C

Chart is for reference only. User is responsible to verify form, fit and function with actual application.

CAM Tech Devices Cross Reference

CL, CLS Series Inline Devices

Description	M/F	Color	Leviton	Leviton	Eaton Cooper Crouse-Hinds	Hubbell	Marinco CLS Series NEMA 3R & 4 (Rubber)
#6-#2 Inline Cam Connector	Male	Black	—	—	—	—	CLS2MB-A
		White	—	—	—	—	CLS2MB-B
		Red	—	—	—	—	CLS2MB-C
		Blue	—	—	—	—	CLS2MB-D
		Green	—	—	—	—	CLS2MB-E
		Brown	—	—	—	—	CLS2MB-F
		Orange	—	—	—	—	CLS2MB-G
		Yellow	—	—	—	—	CLS2MB-H
	Female	Black	—	—	—	—	CLS2FB-A
		White	—	—	—	—	CLS2FB-B
		Red	—	—	—	—	CLS2FB-C
		Blue	—	—	—	—	CLS2FB-D
		Green	—	—	—	—	CLS2FB-E
		Brown	—	—	—	—	CLS2FB-F
		Orange	—	—	—	—	CLS2FB-G
		Yellow	—	—	—	—	CLS2FB-H
#2-2/0 Inline Cam Connector	Male	Black	16D22-E	16D22-UE	E1016-8350	HBL300MBK	CLS20MB-A
		White	16D22-W	16D22-UW	E1016-8355	HBL300MW	CLS20MB-B
		Red	16D22-R	16D22-UR	E1016-8352	HBL300MR	CLS20MB-C
		Blue	16D22-B	16D22-UB	E1016-8356	HBL300MBL	CLS20MB-D
		Green	16D22-G	16D22-UG	E1016-8354	HBL300MGN	CLS20MB-E
		Brown	16D22-H	16D22-UH	E1016-8357	HBL300MBN	CLS20MB-F
		Orange	16D22-O	16D22-UO	E1016-8353	HBL300MO	CLS20MB-G
		Yellow	16D22-Y	16D22-UY	E1016-8351	HBL300MY	CLS20MB-H
	Female	Black	16D31-E	16D31-UE	E1016-8375	HBL300FBK	CLS20FB-A
		White	16D31-W	16D31-UW	E1016-8380	HBL300FW	CLS20FB-B
		Red	16D31-R	16D31-UR	E1016-8377	HBL300FR	CLS20FB-C
		Blue	16D31-B	16D31-UB	E1016-8381	HBL300FBL	CLS20FB-D
		Green	16D31-G	16D31-UG	E1016-8379	HBL300FGN	CLS20FB-E
		Brown	16D31-H	16D31-UH	E1016-8382	HBL300FBN	CLS20FB-F
		Orange	16D31-O	16D31-UO	E1016-8378	HBL300FO	CLS20FB-G
		Yellow	16D31-Y	16D31-UY	E1016-8376	HBL300FY	CLS20FB-H
2/0-4/0 Inline Cam Connector	Male	Black	16D24-E	16D24-UE	E1016-8362	HBL400MBK	CLS40MB-A
		White	16D24-W	16D24-UW	E1016-8367	HBL400MW	CLS40MB-B
		Red	16D24-R	16D24-UR	E1016-8364	HBL400MR	CLS40MB-C
		Blue	16D24-B	16D24-UB	E1016-8368	HBL400MBL	CLS40MB-D
		Green	16D24-G	16D24-UG	E1016-8366	HBL400MGN	CLS40MB-E
		Brown	16D24-H	16D24-UH	E1016-8369	HBL400MBN	CLS40MB-F
		Orange	16D24-O	16D24-UO	E1016-8365	HBL400MO	CLS40MB-G
		Yellow	16D24-Y	16D24-UY	E1016-8363	HBL400MY	CLS40MB-H
	Female	Black	16D33-E	16D33-UE	E1016-8387	HBL400FBK	CLS40FB-A
		White	16D33-W	16D33-UW	E1016-8392	HBL400FW	CLS40FB-B
		Red	16D33-R	16D33-UR	E1016-8389	HBL400FR	CLS40FB-C
		Blue	16D33-B	16D33-UB	E1016-8393	HBL400FBL	CLS40FB-D
		Green	16D33-G	16D33-UG	E1016-8391	HBL400FGN	CLS40FB-E
		Brown	16D33-H	16D33-UH	E1016-8394	HBL400FBN	CLS40FB-F
		Orange	16D33-O	16D33-UO	E1016-8390	HBL400FO	CLS40FB-G
		Yellow	16D33-Y	16D33-UY	E1016-8388	HBL400FY	CLS40FB-H

Chart is for reference only. User is responsible to verify form, fit and function with actual application.

CLS Panel Mounts

Description	M/F	Color	Leviton	Leviton	Eaton Cooper Crouse-Hinds	Hubbell	Marinco
1-1/4" Panel Mount Threaded Stud	Male	Black	16R23-E	16R23-UE	E1016-1600S	HBLMRSBK	CLS40MRSB-AX
		White	16R23-W	16R23-UW	E1016-1605S	HBLMRSW	CLS40MRSB-BX
		Red	16R23-R	16R23-UR	E1016-1602S	HBLMRSR	CLS40MRSB-CX
		Blue	16R23-B	16R23-UB	E1016-1612S	HBLMRSBL	CLS40MRSB-DX
		Green	16R23-G	16R23-UG	E1016-1604S	HBLMRSNG	CLS40MRSB-EX
		Brown	16R23-H	16R23-UH	E1016-1619S	HBLMRSBN	CLS40MRSB-FX
		Orange	16R23-O	16R23-UO	E1016-1603S	HBLMRSO	CLS40MRSB-GX
		Yellow	16R23-Y	16R23-UY	E1016-1601S	HBLMRSY	CLS40MRSB-HX
	Female	Black	16R24-E	16R24-UE	E1016-1631S	HBLFRSBK	CLS40FRSB-AX
		White	16R24-W	16R24-UW	E1016-1636S	HBLFRSW	CLS40FRSB-BX
		Red	16R24-R	16R24-UR	E1016-1633S	HBLFRSR	CLS40FRSB-CX
		Blue	16R24-B	16R24-UB	E1016-1643S	HBLFRSBL	CLS40FRSB-DX
		Green	16R24-G	16R24-UG	E1016-1635S	HBLFRSGN	CLS40FRSB-EX
		Brown	16R24-H	16R24-UH	E1016-1687S	HBLFRSBN	CLS40FRSB-FX
		Orange	16R24-O	16R24-UO	E1016-1634S	HBLFRSO	CLS40FRSB-GX
		Yellow	16R24-Y	16R24-UY	E1016-1632S	HBLFRSY	CLS40FRSB-HX
Panel Mount Double Set Screw	Male	Black	16R21-E	16R21-UE	E1016-1700	HBLMRBK	CLS40MRB-AX
		White	16R21-W	16R21-UW	E1016-1705	HBLMRW	CLS40MRB-BX
		Red	16R21-R	16R21-UR	E1016-1702	HBLMRR	CLS40MRB-CX
		Blue	16R21-B	16R21-UB	E1016-1706	HBLMRBL	CLS40MRB-DX
		Green	16R21-G	16R21-UG	E1016-1704	HBLMRGN	CLS40MRB-EX
		Brown	16R21-H	16R21-UH	E1016-1707	HBLMRBN	CLS40MRB-FX
		Orange	16R21-O	16R21-UO	E1016-1703	HBLMRO	CLS40MRB-GX
		Yellow	16R21-Y	16R21-UY	E1016-1701	HBLMRY	CLS40MRB-HX
	Female	Black	16R22-E	16R22-UE	E1016-1725	HBLFRBK	CLS40FRB-AX
		White	16R22-W	16R22-UW	E1016-1730	HBLFRW	CLS40FRB-BX
		Red	16R22-R	16R22-UR	E1016-1727	HBLFRR	CLS40FRB-CX
		Blue	16R22-B	16R22-UB	E1016-1731	HBLFRBL	CLS40FRB-DX
		Green	16R22-G	16R22-UG	E1016-1729	HBLFRGN	CLS40FRB-EX
		Brown	16R22-H	16R22-UH	E1016-1732	HBLFRBN	CLS40FRB-FX
		Orange	16R22-O	16R22-UO	E1016-1728	HBLFRO	CLS40FRB-GX
		Yellow	16R22-Y	16R22-UY	E1016-1726	HBLFRY	CLS40FRB-HX

Busbar Mounts & Adapters

Description	M/F	Color	Leviton	Eaton Cooper Crouse-Hinds	Hubbell	Marinco
Angle Terminal Panel Mount	Female	Black*	16F21-E	E1016-575	—	CL40FR-ANGLE-A
	Male	Black*	—	—	—	CL40MR-ANGLE-A
Offset Terminal Panel Mount	Female	Black*	16F22-E	E1016-625	—	CL40FR-OFFSET-A
	Male	Black*	—	—	—	CL40MR-OFFSET-A
Paralleling T	-	Black*	16A21-E	E1016-2324	HBLPTBK	CPT
Tapping T	Female	Black*	16A22-E	E1016-2312	HBLTBK	CTT
3fer	-	Black*	16A23-E	E1016-9500	HBLM3FBK	CA3F
Turnaround	Female to Female	Black*	16A24-E	E1016-2352	HBLDFBK	CDFF
	Male to Male	Black*	16A25-E	E1016-2382	HBLDMBK	CDMM

*Other colors available

"Mini" Inline Cam Adapters

Description	M/F	Color	Leviton	Eaton Cooper Crouse-Hinds	Hubbell	Marinco
Paralleling T	—	Black*	15A21-E	E1015-2324	HBL15PTBK	CLMPT-A
Tapping T	Female	Black*	15A22-E	E1015-2312	HBL15TBK	CLMTT-A
Turnaround	Female to Female	Black*	15A23-E	E1015-2352	HBL15DFBK	CLMFF-A
	Male to Male	Black*	—	E1015-2362	HBL15DMBK	CLMMM-A

*Other colors available

Chart is for reference only. User is responsible to verify form, fit and function with actual application.

CAM Tech Devices Cross Reference

CLM “Mini” Inline Devices & Panel Mounts

Description	M/F	Color	Leviton	Leviton	Eaton Cooper Crouse-Hinds	Hubbell	Marinco CLM Mini Series (hard plastic)	Marinco CLM Mini Series (rubber)
150A Mini Inline	Male	Black	15D21-E	15D21-UE	E1015-8306	HBL15MBK	CLM2M-A	—
		White	15D21-W	15D21-UW	E1015-8311	HBL15MW	CLM2M-B	—
		Red	15D21-R	15D21-UR	E1015-8308	HBL15MR	CLM2M-C	—
		Blue	15D21-B	15D21-UB	E1015-8313	HBL15MBL	CLM2M-D	—
		Green	15D21-G	15D21-UG	E1015-8310	HBL15MGN	CLM2M-E	—
		Brown	15D21-H	15D21-UH	E1015-8314	—	CLM2M-F	—
		Orange	15D21-O	15D21-UO	E1015-8309	—	CLM2M-G	—
		Yellow	15D21-Y	15D21-UY	E1015-8307	—	CLM2M-H	—
	Female	Black	15D22-E	15D22-UE	E1015-8331	HBL15FBK	CLM2F-A	—
		White	15D22-W	15D22-UW	E1015-8336	HBL15FW	CLM2F-B	—
		Red	15D22-R	15D22-UR	E1015-8333	HBL15FR	CLM2F-C	—
		Blue	15D22-B	15D22-UB	E1015-8338	HBL15FBL	CLM2F-D	—
		Green	15D22-G	15D22-UG	E1015-8335	HBL15FGN	CLM2F-E	—
		Brown	15D22-H	15D22-UH	E1015-8339	—	CLM2F-F	—
		Orange	15D22-O	15D22-UO	E1015-8334	—	CLM2F-G	—
		Yellow	15D22-Y	15D22-UY	E1015-8332	—	CLM2F-H	—
150A Mini Panel Mount Threaded Stud	Male	Black	15R21-E	15R21-UE	E1015-1600	HBL15MRSBK	CLMMRS-A	CLSMMS-A
		White	15R21-W	15R21-UW	E1015-1605	HBL15MRSW	CLMMRS-B	CLSMMS-B
		Red	15R21-R	15R21-UR	E1015-1602	HBL15MRSR	CLMMRS-C	CLSMMS-C
		Blue	15R21-B	15R21-UB	E1015-1606	HBL15MRSBL	CLMMRS-D	CLSMMS-D
		Green	15R21-G	15R21-UG	E1015-1604	HBL15MRSGN	CLMMRS-E	CLSMMS-E
		Brown	15R21-H	15R21-UH	E1015-1607	—	CLMMRS-F	CLSMMS-F
		Orange	15R21-O	15R21-UO	E1015-1603	—	CLMMRS-G	CLSMMS-G
		Yellow	15R21-Y	15R21-UY	E1015-1601	—	CLMMRS-H	CLSMMS-H
	Female	Black	15R22-E	15R22-UE	E1015-1625	HBL15FRSBK	CLMFRS-A	CLSMFRS-A
		White	15R22-W	15R22-UW	E1015-1630	HBL15FRSW	CLMFRS-B	CLSMFRS-B
		Red	15R22-R	15R22-UR	E1015-1627	HBL15FRSR	CLMFRS-C	CLSMFRS-C
		Blue	15R22-B	15R22-UB	E1015-1631	HBL15FRSBL	CLMFRS-D	CLSMFRS-D
		Green	15R22-G	15R22-UG	E1015-1629	HBL15FRSGN	CLMFRS-E	CLSMFRS-E
		Brown	15R22-H	15R22-UH	E1015-1632	—	CLMFRS-F	CLSMFRS-F
		Orange	15R22-O	15R22-UO	E1015-1628	—	CLMFRS-G	CLSMFRS-G
		Yellow	15R22-Y	15R22-UY	E1015-1626	—	CLMFRS-H	CLSMFRS-H
150A Mini Panel Mount Double Set Screw	Male	Black	—	—	—	HBL15MRBK	CLMMR2-A	CLSMMR2-A
		White	—	—	—	HBL15MRW	CLMMR2-B	CLSMMR2-B
		Red	—	—	—	HBL15MRR	CLMMR2-C	CLSMMR2-C
		Blue	—	—	—	HBL15MRBL	CLMMR2-D	CLSMMR2-D
		Green	—	—	—	HBL15MRGN	CLMMR2-E	CLSMMR2-E
		Brown	—	—	—	—	CLMMR2-F	CLSMMR2-F
		Orange	—	—	—	—	CLMMR2-G	CLSMMR2-G
		Yellow	—	—	—	—	CLMMR2-H	CLSMMR2-H
	Female	Black	—	—	—	HBL15FRBK	CLMFR2-A	CLSMFR2-A
		White	—	—	—	HBL15FRW	CLMFR2-B	CLSMFR2-B
		Red	—	—	—	HBL15FRR	CLMFR2-C	CLSMFR2-C
		Blue	—	—	—	HBL15FRBL	CLMFR2-D	CLSMFR2-D
		Green	—	—	—	HBL15FRGN	CLMFR2-E	CLSMFR2-E
		Brown	—	—	—	—	CLMFR2-F	CLSMFR2-F
		Orange	—	—	—	—	CLMFR2-G	CLSMFR2-G
		Yellow	—	—	—	—	CLMFR2-H	CLSMFR2-H

PN	Page	PN	Page	PN	Page	PN	Page	PN	Page
100F	60	12VBP	87	12VRC	89	157AY	40	203445	54
100FR	61	12VBP.OEM	87	12VRC.OEM	89	15CLF	55	205C	24
100FR-DSS	61	12VBPS2	86	12VRCO	89	15CLM	55	205CBL	26
100M	60	12VBPS2.OEM	86	12VRCSP.OEM	89	15RA	11	205CL	29
100MR	61	12VBPS3	88	12VXT	89	165AYB-NC	40	205CRCN	31
100MR-DSS	61	12VBPS3.OEM	88	150025	23	16CLF	55	205CRPN	31
100R	39	12VBR	87	150025NL	23	16CLM	55	205CRR	31
102182	38	12VBR.OEM	87	150050	23	199109PK	39	205FI	25
102N	38	12VBRAD	87	150050NL	23	199110PK	39	205FO	26
1035	85	12VBRAD.OEM	87	150BBI	76	200BBI.RV	11	205P	24
1036	85	12VBRS2	86	150BBI-TM	76	200BBIW.OEM	76	205PBL	26
1038	85	12VBRS2.OEM	86	150BBI.OEM	76	2014C	26	205PL	28
1039	85	12VBRS3	88	150BBIW	76	2014FI	26	205R	25
103RN	38	12VBRS3.OEM	88	150BBIW.OEM	76	2014FO	26	205RIG	32
103RN.OEM	38	12VCOMBO	84	150CC.OEM	76	2014P	26	206C	26
1045	85	12VCOMBO-B	84	150CCI	76	2014R	26	206CBL	26
1046	85	12VCOMBON-B	84	150CCTM.OEM	76	2015C	26	206FI	26
104SPP	40	12VCOMBOW-B	84	150PHB	77	2015FI	26	206FO	26
105SPP	40	12VCP	87	150PHW	77	2015FO	25	206P	26
106F-H	60	12VCP6	87	151225	23	2015P	26	206PBL	26
106FR-DSS-H	61	12VCPS2	86	151250	23	2015R	26	206R	26
106FR-H	61	12VCPS3	88	1520BI.OEM	38	2016C	26	206RIG	33
106M-H	60	12VDUSB	84	152400-01	76	2016P	26	207P	26
106MR-DSS-H	61	12VDUSB-B	84	152400-03	76	2016R	26	20F	60
106MR-H	61	12VDUSBN-B	84	152AY	40	2021C	26	20F-AW	60
110R	39	12VDUSBNP.OEM	84	153AY	40	2021FO	26	20F-RT	60
125W*	40	12VDUSBNPL.OEM	84	154800-01	76	2021P	26	20F-X	60
12BKT	89	12VDUSBW-B	84	154800-03	76	2021R	26	20FR	61
12MP.OEM	89	12VPG	89	157200-01	76	2030FL	39	20FR-RT	61
12VAD	89	12VPG.OEM	89	157200-03	76	203279.1	47	20M	60

PN	Page	PN	Page	PN	Page	PN	Page	PN	Page
20M-AW	60	2701A	73	3021FO	26	3775	27	4721CR	31
20M-RT	60	2707A	71	3021P	26	3777	27	4729	26
20M-X	60	2708A	71	3021R	26	4270L	29	4729BL	26
20MR	61	2710A	71	305BC	31	430112.1	55	4729L	28
2100	79	2711A	71	305BP	31	430117.1	55	4731CR	31
2100-B	79	2713A	71	305C	26	430120.1	55	4760	26
2101	79	2720A	71	305CRCN	31	430121.1	55	4770	26
2101-B	79	2731A	71	305CRPN	31	430126.1	55	4779	26
2102	79	2740A	71	305CRR	30	430129.1	55	4785	26
2102-B	79	27505	77	305CRRB	31	430130.1	55	4786	26
2110A	79	27515	77	305FI	26	430131.1	55	500017PLT.1	55
2110A-B	79	28106	72	305FO	26	430171.1	55	500072	55
2111A	79	28210	72	305P	26	430244.1	55	500R	39
2111A-17	79	300275	89	305R	26	430245.1	55	510R	39
2111A-B	79	3014C	26	305RIG	33	430246.1	55	520730.1	55
2111A-O	79	3014FI	26	306C	26	4550	26	5252	11
2112A	79	3014FO	26	306FI	26	4560	26	5262CRR	17
2112A-B	79	3014P	26	306FO	26	4570	26	5266	10
2300A	79	3014R	26	306P	26	4579	26	5266BL	11
2300A-B	79	3015C	26	306R	26	4585	26	5266CRS	16
2303A	79	3015FI	26	306RIG	33	4586	26	5266L	18
2303A-B	79	3015FO	26	320IEC13	22	45WRA.OEM	26	5266RA	11
2304A	79	3015P	26	320IEC15	22	4700	26	5269	10
2304A-B	79	3015R	26	320IEC19	22	4700CR	31	5269BL	11
24104	74	3016C	26	3762N	27	4710	26	5269CR	16
24105	75	3016FO	26	3763N	27	4715	26	5269L	18
25104	75	3016P	26	3764N	27	4716	26	5278	11
25105	74	3016R	26	3765N	27	4720	26	5278BL	11
2603-B	72	3021C	26	3769	27	4720BL	26	5278BWP	10
2606A-B	72	3021FI	26	3771	27	4720L	29	5278DRI	11

PN	Page	PN	Page	PN	Page	PN	Page	PN	Page
5279	11	6361CRN	30	83116035	78	CL40WTC-L-062	54	CLMMC	53
5279BL	11	6361CRN	31	83125035	78	CL40WTC-L-125	54	CLMMM	51
5279DRO	11	6364CRNS	31	83200150	78	CL40WTC-L-187	54	CLMMR2	49
5352	11	6365CRN	31	CA318F	52	CL40WTC-S-062	54	CLMMRS	49
5366	11	6369CRS	31	CA3F	52	CL5266	12	CLMPT	51
5369	11	6370CR	31	CA3FST	52	CL5266BL	13	CLMTT	51
5369CR	17	7411C	27	CA3M	52	CL5269	12	CLS1820FB	47
5378	11	7413C	27	CA3MST	52	CL5269BL	13	CLS1820FCONT	47
5379	11	7420CRS	39	CD1816MF	52	CL5366	13	CLS1820MB	47
5379DRO	11	7420GY	39	CD18TT	52	CL5369	13	CLS182FB	47
5462	11	7715CRN	38	CDFF	52	CL5666	13	CLS182FCONT	47
5466	11	7717N	38	CDMM	52	CL5669	13	CLS182MB	47
5469	11	7764N	27	CL20FRB	48	CL8215	13	CLS1840FB	47
5478	11	7765N	27	CL20MRB	48	CL8215T	13	CLS1840FCONT	47
5479	11	7788BL	39	CL40FC	53	CL8219	13	CLS1840FRB	50
5666	11	7788CRS	39	CL40FR-ANGLE	52	CL8219T	13	CLS1840FRSB	50
5669	11	7788GY	39	CL40FR-OFFSET	52	CLL3RN	53	CLS1840MB	47
5678	11	7958	27	CL40FRB	48	CLM2F	47	CLS1840MRB	50
5678DRI	11	8215	15	CL40FRB-BB*	48	CLM2M	47	CLS1840MRSB	50
5679	11	8215T	14	CL40FRSB	48	CLM3R	53	CLS18FBOOT	47
6017	38	8215TL	15	CL40FRSB2	48	CLMAD3F	51	CLS18MBOOT	47
6018	38	8215TRA	15	CL40FRSBML	48	CLMAD3FST	51	CLS20FB	47
60F	60	8219	15	CL40MC	53	CLMADFF	51	CLS20FCONT	47
60FR	61	8219T	15	CL40MR-ANGLE	52	CLMADFM	51	CLS20MB	47
60FR-DSS	61	8219TL	15	CL40MR-OFFSET	52	CLMADMF	51	CLS20MCONT	47
60M	60	83007021	78	CL40MRB	48	CLMADMM	51	CLS2FB	47
60MR	61	83007030	78	CL40MRB-BB*	48	CLMFC	53	CLS2FCONT	47
60MR-DSS	61	83012021	78	CL40MRSB	48	CLMFF	51	CLS2MB	47
6360CRN	30	83012031	78	CL40MRSB2	48	CLMFR2	49	CLS2MCONT	47
6360CRN	31	83116025	78	CL40MRSBML	48	CLMFRS	49	CLS40FB	47

PN	Page	PN	Page	PN	Page	PN	Page
CLS40FCONT	47	CLSMMR5	49	G100F	62	GCS124A25	22
CLS40FRB	48	CLSPRESS	55	G100F-FU	62	GCS124A50	22
CLS40FRB-BB	48	CPT	52	G100FR1-R5	63	P15-PC20	66
CLS40FRB-BB2	48	CPTFST	52	G100M	62	P15-SP20	66
CLS40FRSB	48	CS6360N	27	G100M-DB	62	P15-SP20	66
CLS40FRSB1.5	48	CS6361N	27	G100M-FU	62	PC20FCI	67
CLS40FRSB2	48	CS6364N	27	G100MR1-R5	63	PC20FCO	67
CLS40MB	47	CS6365N	27	G106F-H	62	PC20MRI	67
CLS40MCONT	47	CS6369	27	G106M-DB-H	62	PC20MRO	67
CLS40MRB	48	CS6370	27	G106M-H	62	S15-30	40
CLS40MRB-BB	48	CS6375	27	G20F	62	S20-15	40
CLS40MRB-BB2	48	CS6375FL	27	G20F-FU	62	S20-30	40
CLS40MRSB	48	CS8164N	27	G20M	62	S30-15	40
CLS40MRSB1.5	48	CS8165N	27	G20M-FU	62	SP20-C20	66
CLS40MRSB2	48	CS8169	27	G60F	62	SP20-PC20	66
CLS45FR2SB	50	CS8175	27	G60F-FU	62	TRIXFER	60
CLS45FRB	50	CS8264N	27	G60F-RT	62	TRIXFER.FF	60
CLS45FRB-BB	50	CS8265N	27	G60FR-TH	63	WP1	39
CLS45FRB-BB2	50	CS8269	27	G60M	62		
CLS45FRSB	50	CS8275	27	G60M-DB	62		
CLS45MR2SB	50	CS8364N	27	G60M-FU	62		
CLS45MRB	50	CS8365N	27	G60M-RT	62		
CLS45MRB-BB	50	CS8369	27	GCS103B10	22		
CLS45MRB-BB2	50	CS8375	27	GCS103B25	22		
CLS45MRSB	50	CS8464N	27	GCS103B50	22		
CLSFBOOT	47	CS8465N	27	GCS104C10	22		
CLSMBOOT	47	CS8469	27	GCS104C25	22		
CLSMFR2	49	CTT	52	GCS104C50	22		
CLSMFR5	49	CTTFST	52	GCS123D25	22		
CLSMMR2	49	CTTMST	52	GCS124A10	22		

Industrial Solutions

For decades Ancor, BEP, Blue Sea Systems, Guest, Marinco, Marinco Power Products, Mastervolt, ProMariner and Progressive Industries have worked independently to provide innovative electrical products. Now the eight companies are working together to offer comprehensive electrical solutions for industrial applications.

Providing more than products. Providing Solutions.

ANCOR

Wire & Cable
Terminals & Lugs
Wire Management
Tools & Testers
Lighting
ancorproducts.com

BEP

Battery Management
Connectors & Insulators
Circuit Protection
Power Distribution Panels
Meters
bepmarine.com

BLUE SEA SYSTEMS

Power Conversion
Battery Management
Circuit Protection & Switches
Connectors & Insulators
Power Distribution
Meters
blueseasystems.com

GUEST

Power Conversion
marinco.navico.com

MARINCO

Shore Power
DC Power Connections
Power Conversion
Battery Management
Wiring Devices
DC Devices
CAM Tech Devices
Stage Pin Devices
marinco.navico.com

MASTERVOLT

Power Conversion
Batteries
Battery Management
Transformers
Alternators & Regulators
Digital Switching
mastervolt.com

ProMariner®

Waterproof Battery Chargers
Vented Battery Chargers
Inverters
Isolators
Accessories
promariner.navico.com

Progressive Industries

Surge Protection
navico.com/progressive-industries



Americas

N85 W12545 Westbrook Crossing
Menomonee Falls, WI 53051 USA
p 800.307.6702

Asia Pacific

42 Apollo Drive
Rosedale, Auckland 0632
New Zealand
p +64.9.415.7261

Europe, Middle East & Africa

Snijdersbergweg 93
1105 AN Amsterdam
The Netherlands
p +31(0)20 34 22 100

technical@marinco.com

© 2024 Navico Group. All Rights Reserved.

Navico Group is a division of Brunswick Corporation

®Reg. U.S. Pat. & Tm. Off, and ™ common law marks. Visit www.navico.com/intellectual-property to review the global trademark rights and accreditations for Navico Group and other entities.

Unauthorized copying or reproduction is a violation of applicable laws.

NG-137-CAT-0424

ANCOR

BEP

 **BLUE SEA**
SYSTEMS

MARINCO

MASTERVOLT

ProMariner®

Progressive
Industries

FSC Details
(added by printers)