■ BLUE SEA SYSTEMS Marine Electrical Products

SMS Surface Mount System

PN 3113 / PN 3116 / PN 3117 / PN 3118 / PN 3119 / PN 3120

Meets ABYC E11 when used with an ELCI Main circuit breaker and mounted within 10 feet of the shore power inlet



The Surface Mount System panel enclosure should be installed by a certified marine electrician.



Hazardous voltage. Improper handling can cause death or serious injury. Turn off any shore sources and disconnect shore cord(s). Lock out other AC power sources before beginning electrical installation.

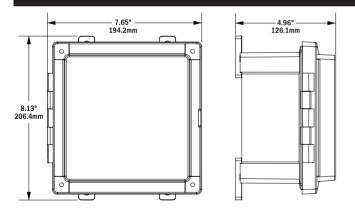
- · Models available with ELCI Main circuit breakers for 120V 30A, 120V 50A, and 120/240V 50A
- · Blank apertures for custom breaker loading
- · Glass filled polycarbonate base
- · Clear cover allows easy view of circuit breaker status
- · Overlapping cover for strength and increased gasket protection
- · Oversized, formed in place seamless PUR gasket
- · Easily removable stainless steel hinge pin for unobstructed installation
- Stainless steel latch secures cover without penetrating the enclosure
- Blank circuit positions accommodate Carling Technologies™ A and C Series Flat or Raised Rocker and ELCI Main circuit breakers
- · Stainless steel mounting hardware included
- Includes waterproof glands (3116, 3117, 3118, 3119, 3120)
- LED lights for back lighting and ON indication (3116, 3117, 3118, 3119, 3120)

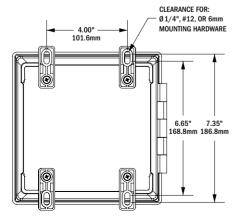
GUARANTEE: Blue Sea Systems stands behind its products for as long as you own them. Find detailed information at www.bluesea.com/about. For customer service, call 800-222-7617.

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Enclosure Dimensions





Specifications

Box Specifications

Temperature Range -40°C to +85°C Cover Screws and Hardware 10-32, stainless steel Mounting Hardware 1/4" diameter, #12, (6 mm)

Regulatory

IP66—Protected against powerful water jets

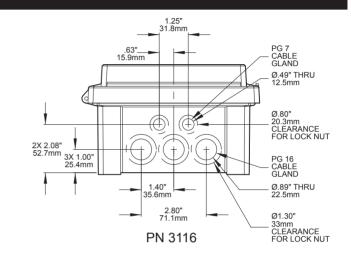
Flammability rating—Per UL 508

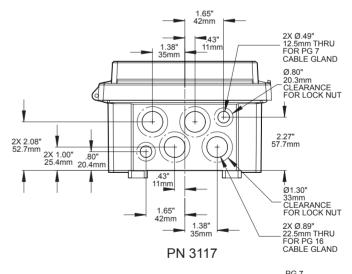
Toxicity- Non-toxic, halogen free, RoHS compliant

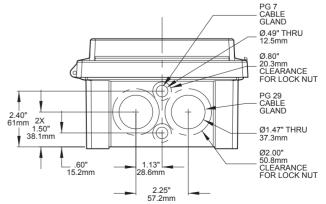
UL Listed and NEMA 4X rated, NEMA Type 4, 4X, 6, 6P, 12, and 13

Specifications subject to change. See www.bluesea.com for additional information and specifications

Drill Guides







PN 3118, 3119, 3120

Installation

Required Tools

- Hole Saw, drill or step drill suitable for cable glands (see information on back).
- · Drill motor suitable for above
- Screw Drivers
- Knife
- · Measuring device
- · Wire cutters and Crimpers

Required Parts

- · Suitable ring terminals for circuit breaker and grounding connections
- In some installations it may be desirable to attach a mounting substrate to the hull with adhesive or epoxy instead of screwing directly to the hull.

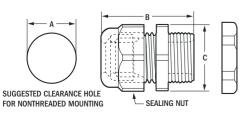
Installing the Enclosure Panel

- The Surface Mount System Enclosure Panel should be installed by a certified marine electrician
- Plan the installation by determining where the enclosure will be mounted o Per ABYC, the enclosure cannot be mounted further than the reach of a 10' cable from the AC power inlet
- o Consider the needed clearances to access the enclosure and open the sealed cover
- o Allow for a wire drip loop outside the enclosure and sufficient service loop for wires inside the enclosure
- Determine which included glands are needed. It is recommended that glands be installed on the bottom of the enclosure to maintain the waterproof integrity of
- Smaller glands may permit convenient installation of a galvanic isolator if used in the systems. In this case the line safety ground wire would exit the enclosure to the galvanic isolator and the boat side of the galvanic isolator would return to the enclosure to join the internal connections and the ground from the load side
- Try all cable glands on the wire for correct fit before proceeding.
- · Flat cables can be manipulated to a nearly round shape to fit and seal better
- Large round cables with #6 Wire may be a very tight fit in the cable gland. Dismantle the gland and use wire lubricant to ease cable through the rubber
- · When drilling holes for cable glands, be sure to allow sufficient clearance inside for the nut. The best location is as close to the back of the enclosure as possible and still allow for the nut.

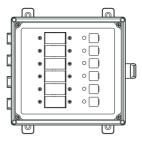
Gland Specifications

Gland Specifications

	WIRE SIZE	CABLE DIA. RANGE		DIMENSIONS
Small 3124 (PG7)	#14 to #10 Single Wire	Min. Dia. .114 in 2.9 mm	Max. Dia. .250 in 6.4 mm	A. Clearance Hole 492 in (12.5 mm) B. Max. O. A. Length 1.17 in (29.7 mm) C. Wrenching Flats .59 in (15.0 mm) Reference diagram below
Medium 3125 (PG16)	#14 to #10 Cable, 3 Conductor	.230 in 5.8 mm	.530 in 13.9 mm	A. Clearance Hole .886 in (22.5 mm) B. Max. O. A. Length 1.66 in (42.2 mm) C. Wrenching Flats 1.05 in (26.7 mm) Reference diagram below
Large 3126 (PG29)	#6 Cable, 4 Conductor	.590 in 15.0 mm	.990 in 25.4 mm	A. Clearance Hole 1.470 in (37.3 mm) B. Max. O. A. Length 2.23 in (56.6 mm) C. Wrenching Flats 1.66 in (42.2 mm) Reference diagram below

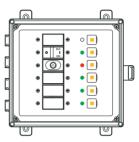


Components Included



3113 SMS Panel Enclosure Includes: 6 blank circuit positions

6 LED plugs 12 circuit breaker mounting screws 30 Basic DC labels, 4205 30 Basic AC labels, 4206 Panel Voltage ID labels 12V DC, 24V DC 120V AC, 230V AC, 120/240V AC



3116 SMS Panel Enclosure Includes:

ELCI Main + 3 blank circuit positions 1 ELCI Main 120V 30A, 30mA, 3102

2 small wire glands, 3124 3 medium wire glands, 3125

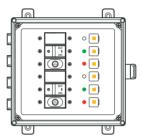
4 green "ON" indicating 120V AC LEDs, 8034 1 red "Reverse Polarity" indicating 120V AC LED, 8066

1 LED plug 12 circuit breaker mounting screws

6 Backlit circuit label positions

1 AC Main label, 1 Reverse Polarity label, 1 ELCI label 30 Basic AC labels, 4206

Panel Voltage ID label-120V AC



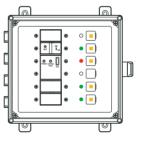
3117 SMS Panel Enclosure Includes:

2 x 120V AC / 30A ELCI Main 2 ELCI Main 120V 30A, 30mA, 3102

2 small wire glands, 3124 4 medium wire glands, 3125 2 green "ON" indicating 120V AC LEDs, 8034 2 red "Reverse Polarity" indicating 120V AC LEDs, 8066 2 LED plugs

12 circuit breaker mounting screws 6 Backlit circuit label positions Source Selection Label Set (10 labels)

2 Reverse Polarity labels, 2 ELCI labels Panel Voltage ID label-120V AC



3118 SMS Panel Enclosure Includes:

ELCI Main + 2 blank circuit positions 1 ELCI Main 120V 50A, 30mA, 3103

2 small wire glands, 3124

1 medium wire gland, 3125

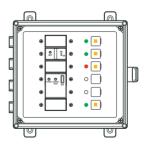
2 large wire glands, 3126 3 green "ON" indicating 120V AC LEDs, 8034 1 red "Reverse Polarity" indicating 120V AC LED, 8066

12 circuit breaker mounting screws

5 Backlit circuit label positions
1 AC Main label, 1 Reverse Polarity label, 1 ELCI label

30 Basic AC labels, 4206

Panel Voltage ID label-120V AC



3119 SMS Panel Enclosure Includes:

ELCI Main + 1 blank circuit position 1 ELCI Main 120/240V. 50A. 30mA. 3104

2 small wire glands, 3124

1 medium wire gland, 3125

2 large wire glands, 3126 3 green "ON" indicating 120V AC LEDs, 8034 1 red "Reverse Polarity" indicating 120V AC LED, 8066 3 LED plugs

12 circuit breaker mounting screws

4 Backlit circuit label positions 1 AC Main label, 1 Reverse Polarity label, 1 ELCI label

30 Basic AC labels, 4206

1 AC Main label, 1 ELCI label Panel Voltage ID Label- 240V AC

Panel Voltage ID label-120V/240V AC



3120 SMS Panel Enclosure Includes: ELCI Main for Isolation Transformer 1 ELCI Main 240V, 50A, 30mA, 3093

2 small wire glands, 3124 1 medium wire gland, 3125 2 large wire glands, 3126 2 green "ON" indicating 240V AC LEDs, 6806 4 LED plugs 12 circuit breaker mounting screws 2 backlit circuit label positions

- Red circuit status indicator LED
- Green circuit status indicator LFD
- LED plug
- Backlit circuit label position