



# **Eaton Corporation Marina Power and Lighting**

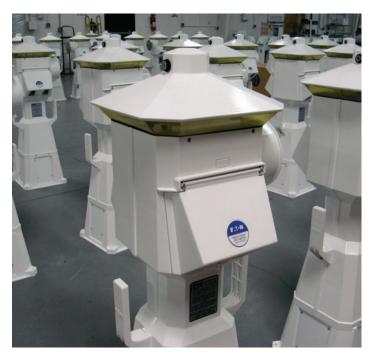
#### A Powerful Solution for the Marina Industry

# The Most Complete, Highest Quality, Electrical Distribution Equipment for Marina Applications

Known as a leader in electrical control, power distribution, and industrial automation products and services, Eaton Corporation consistently provides power management solutions. Eaton is able to provide a complete electrical solution to marina developers and managers. For more information on the other products available from Eaton, visit us online at www.eatonelectrical.com or www.marinapower.com.

#### What Eaton Has to Offer:

- Eaton is the market leader and has more marina power products in service than all other suppliers combined.
- We offer a complimentary, comprehensive in-house electrical design service for your complete marina development needs utilizing high-quality products manufactured by Eaton.
- Eaton can provide your marina with the highest quality power pedestals and distribution equipment, as well supply the entire electrical needs of your surrounding development.
- Eaton offers a comprehensive portfolio of electrical solutions for your complete marina project. Eaton sells to customers in over 150 countries, has 100 years' experience in power management, and is the world's leading supplier of marina power equipment.



# Let Eaton Provide All of the Electrical Solutions for Your Marina Development

Make Eaton your ultimate solutions provider for all your electrical needs. Eaton offers a complete portfolio of electrical solutions to complete your next marina project.

#### Front Cover:

Rybovich Super Yacht Marina West Palm Beach, FL

#### **MegaYacht Powerpoint**





#### About Us

Since 1990, Marina Power and Lighting has been providing boat owners and marina operators with the highest quality, weatherproof electrical equipment on the market. We continue to lead the industry with the largest selection of innovative marine products, ranging from power pedestals to distribution equipment and wire.

Our manufacturing facility in Williamsburg, Virginia allows us the capacity needed to keep up with today's growing demand. The Lighthouse, Hatteras, and Newport Harbor Mate are constructed of highstrength, engineered resins that make them the longest lasting, most reliable units available on the market. We have units that have been in service for more than 20 years and are still operating daily. These units offer solid bolted electrical connections and yield unprecedented reliability in the tough marine environment.

Eaton Corporation utilizes the latest technology in laser cutting machines, fabrication equipment, and coating processes. This allows our facility to manufacture stainless steel pedestals, substation enclosures, power point mega yacht units and distribution panel cabinets. We are able to control all aspects of manufacturing and provide a high-quality product at the most competitive price in the industry.

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Sun Harbor Marina, San Diego, CA.

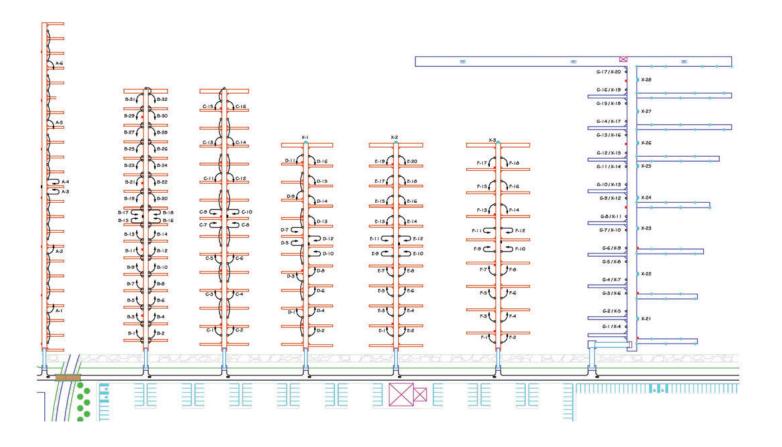
# **Eaton Corporation Marina Power and Lighting**

#### **Electrical Layout Designs**

Our professional sales and technical staff will assist you and your design team through all aspects of your marina project. Proper planning and layout of the electrical system will minimize equipment and wire costs, as well as reduce installation time and possible construction delays. Eaton can also provide all the wiring necessary to complete the project.

#### **Electrical Layout Designs:**

- Circuit Layout
- Transformer Sizes
- Pedestal and Receptacle Selection
- Disconnect Sizes
- Panel, Breaker and Wire Sizes
- Voltage Requirements
- Voltage Drops
- Conduit Sizes
- Substation Sizes and Design



# **Eaton Corporation Marina Power and Lighting**

# Complete Electrical Solutions for the Marina Industry

#### Generators



Provides backup power for critical marina applications.

- Single-phase and three-phase
- Powered by natural gas or propane source
- Rugged outdoor enclosures
- Automatic transfer switches available

#### **Surge Protectors**



Whole marina application surge protection at the service entrance point to protect the electronics in your marina development. Don't let the electronic equipment in your marina go unprotected!

- · 200 kAIC interrupting capacity
- Optional indicating lights confirm properly functioning device

#### **Switchboards**



Provides up to 600V electrical distribution for landside marinas, warehouses, boatyards, dry docks, or shore side docks.

- Up to 6000A
- Indoor or outdoor (Type 3R) stainless steel enclosures
- Available with main circuit breaker or main fusible switch with ground fault protection
- Available with utility metering provisions and factory installed SPD

#### **Panelboards**



Provides circuit protection for lighting and appliance or power distribution needs.

- Single- and three-phase panelboards through 1200A
- Utilizes Eaton bolt-on breakers
- Main breaker, main lugs, Indoor or outdoor panelboards available

#### Fire Safety



Fire and emergency preparedness for your marina.

- Available with 10 or 20 lb. ABC type fire extinguisher
- Optional life ring and alarm strobe
- Fire Hose Cabinet available with 100 ft. fire hose
- Enables marina owners to conform to NFPA 303 4.2.2.1

#### Metering



Revenue-grade metering for your marina or landside development.

- Residential and commercial group metering through 2000A, single-phase or three-phase
- Digital electronic kilowatt-hour meters integral to pedestal
- Wireless metering system

#### **Safety Switches**



Can be used for circuit protection or point of use disconnect.

- 30-1200A, single-phase or three-phase 600V maximum
- Indoor or outdoor enclosures (NEMA 1, NEMA 3R, or NEMA 4X)
- Non-fused or fused available
- Padlockable handle for critical applications



Lighthouse



Lighthouse - SS



Admiral - SS



**Hatteras Light** 



**Newport Harbor Mate** 



**Firehouse** 



**Fire House Cabinet** 



**Mariner Lighting Bollard** 

#### Power Pedestals

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THE HOSE Capitlet
Mariner Lighting Bollard18

#### Distribution Equipment

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Surge Protection Device.....27

#### MegaYacht Powerpoint



**Panels** 

#### **Standard Substation**





**Ground Fault Monitor** 

#### **Double Panel Substation**





**Digital Electronic Meters** 

#### **Transformers**





**Smart Start Kiosk** 

#### Lighthouse

#### **Power Pedestal**

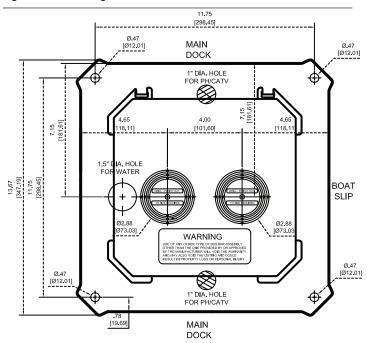
One of our most popular units, the all-purpose Lighthouse pedestal has a wide range of features. With units in service around the world, this stylish power pedestal is recognized for its practicality and exceptional durability.





Lighthouse Power Pedestals, Cordova Marina, Alaska

#### Lighthouse Base Diagram









Base Cap

### Lighthouse Power Pedestal

- · Standard Features
- · Available Options
- Dimensions

#### **Standard Features**

- Photocell-Controlled 14 Watt Compact Fluorescent Twistbulb Light with Amber Lens That Provides 360 Degrees of Lighting
- Lockable Weatherproof Doors Which Protect Breakers and Receptacles While In Use (A Requirement of N.F.P.A. 303 and NEC Art. 555)
- · Hose and Cable Brackets
- Heavy Resin Housing with a Two-Part Polyurethane Coating for a UV Resistant, Long Lasting Finish
- Copper Bus Bar with Ratings from 250 to 500 Amps
- "Hingeless" Base Providing Easy Access for Both Installation and Maintenance
- Backlit Universal Faceplate for Easy Receptacle Plug-In at Night
- NEMA 3R Rating
- Circuit Breaker Protection for All Receptacles

#### **Available Options**

- · Digital Electronic Metering
- · Built-In Meter Socket
- 20A/125V GFI Receptacle\*
- High-Speed Internet Connections
- Wireless Remote Metering for Electric and Water
- Surge Protection Device (SPD) to Protect from Voltage Surges, Spikes or Lightning on the AC Power Line
- Stainless Steel Door Hinge on Receptacle Main Doors
- Single or Dual Steel 1/4 Turn Ball Valves with 3/4" Hose Bibs and Stainless Steel Handles
- Single or Dual Phone and /or Cable TV Connections
- · Base Cap
- · Base Extension
- LED Lighting
- · Clear, Blue, and Red Lenses

#### **Dimensions**

#### LIGHTHOUSE

	IN.	IVIIVI
Height:	44	1117.6
Width:	13.75	349.25
Depth:	13.75	349.25

#### **Cable & Internet Connections**



Bus Bar



**Hingeless Base** 



**Optional Meter Socket** 



<sup>\* 20</sup> Amp GFI receptacles are not to be used for shore power.

#### **Lighthouse - SS**

#### **Power Pedestal**

The Lighthouse-SS offers the same standard features and options as the standard lighthouse. Like all stainless steel marina products manufactured by Eaton, the Lighthouse-SS is made of high-quality 316L stainless steel for superior corrosion-resistance.

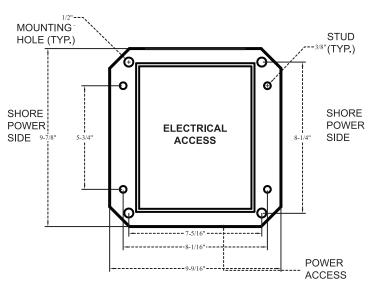




Lighthouse - SS Power Pedestal

#### **Lighthouse - SS Base Diagram**

www.marinapower.com



#### Lighthouse - SS Power Pedestal

- Standard Features
- Available Options
- Dimensions

#### **Standard Features**

- Photocell-Controlled 14 Watt Compact Fluorescent Twistbulb Light with Amber Lens That Provides 360 Degrees of Lighting
- Available with Lockable Weatherproof Doors
- · Hose and Cable Brackets
- Heavy 316L Stainless Steel Housing that is Powder-Coated with a Polyester Resin
- Copper Bus Bar with Ratings from 250 to 500 Amps
- Large Removable Access Panel for Easy Maintenance and Installation
- Backlit Universal Faceplate for Easy Receptacle Plug-In at Night
- NEMA 3R Rating
- Circuit Breaker Protection for All Receptacles

#### **Available Options**

- · Digital Electronic Metering
- 20A/125V GFI Receptacle\*
- High-Speed Internet Connection
- Wireless Remote Metering Available for Water and Electricity
- Surge Protection Device (SPD) to Protect from Voltage Surges, Spikes or Lightning on the AC Power Line
- Single or Dual Phone and/ or Cable TV Connections
- Single or Dual 3/4" Hose Bibs with Stainless Steel Handles
- LED Lighting
- · Clear, Blue, and Red Lenses
- \* 20 Amp GFI receptacles are not to be used for shore power.

#### **Dimensions**

#### **LIGHTHOUSE - SS**

	IN.	MM
Height:	44	1117.6
Width:	9.565	242.951
Depth:	9.875	250.825

#### **Bus Bar**



#### **Power Pedestal**

The flagship of our pedestal line, the Admiral-SS provides amperage capabilities up to 500 Amps and voltages of 480/277 three-phase, 208/120 three-phase, 120/240 single-phase, and combinations of these receptacles in one unit to serve nearly any size vessel.





www.marinapower.com

**Admiral - SS Receptacle Configurations** 

OUTLETS SIDE 1	OUTLETS SIDE 2
100-100 Single-Phase	100-100 Single-Phase
100-100 Three-Phase	100-100 Three-Phase
100-100 Single-Phase	100-100 Single-Phase
100 Single-Phase	100 Single-Phase
100 Single-Phase	100 Three-Phase
100-100-50-50 Single-Phase	100-100-50-50 Single-Phase
100-100-50-50 Single-Phase	100-100-50-50 Three-Phase
200 Three-Phase	200 Three-Phase
100-100 Single-Phase	200 Three-Phase
100-100-50-50 Single-Phase	200 Three-Phase

#### Admiral - SS Power Pedestal

- · Standard Features
- · Available Options
- Dimensions

#### **Standard Features**

- Heavy 316L Stainless Steel Housing That Is Powder Coated with a Polyester Resin
- Photocell Controlled
   Dual 14 Watt Compact
   Fluorescent Twistbulb Light
   with Amber Lens That
   Provides 360 Degrees
   of Lighting

#### **Dimensions**

#### ADMIRAL - SS

	IN.	MM
Height:	50.55	1283.97
Width:	14	355.6
Depth:	14	355.6

#### **Available Options**

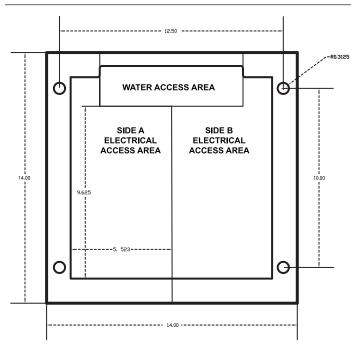
- Dual Phone and/or Cable TV Connections
- Four 100A Receptacles of Any Two Voltage Combinations Such As 277/480 Three-Phase, 120/208 Three-Phase, or 120/240 Single-Phase
- 200A/480V Receptacles
- When the 100A 120/240V
   Receptacles Are Used, Two
   50 Amp 120/240V
   Receptacles Can Also Be
   Provided for a Total of
   500 Amps
- 20A/125V GFI Receptacle\*
- Single or Dual Cat5
   High-Speed Internet
   Connections

- Single or Dual Water 1/4 Turn Ball Valves with 3/4" Hose Bibs and Stainless Steel Handles
- Digital Electronic Metering
- Wireless Remote Metering Available for Water and Electricity
- LED Lighting
- · Clear, Blue, and Red Lenses

#### Admiral - SS Base Diagram (Single Feed)

# WATER ACCESS AREA 9,625 ELECTRICAL ACCESS AREA O 14,00 14,00

#### Admiral - SS Base Diagram (Double Feed)



<sup>\* 20</sup> Amp GFI receptacles are not to be used for shore power.

#### **Hatteras Light**

#### **Power Pedestal**

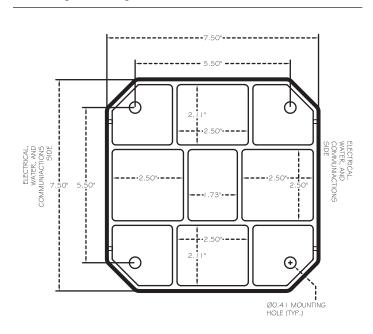
The Hatteras Light is an elegant and low cost solution to your shore power needs. It utilizes the same 360 degree light assembly as the Lighthouse, yet is only 31 inches tall. Thousands of these attractive pedestals are found not only in marinas, but also around pools, deck areas, boardwalks and landscape areas.



Hatteras Light Power Pedestal



#### **Hatteras Light Base Diagram**



#### Hatteras Light Power Pedestal

- Standard Features
- · Available Options
- Dimensions

#### **Standard Features**

- Photocell-Controlled 14 Watt Compact Fluorescent Twistbulb Light with Amber Lens That Provides 360 Degrees of Lighting
- Heavy Resin Housing with a Two-Part Polyurethane Coating for a UV Resistant, Long Lasting Finish
- Copper Bus Bar with a Maximum Rating of 140 Amps
- NEMA 3R Rating
- Circuit Breaker Protection for All Receptacles

#### **Available Options**

- 20A/125V GFI Receptacle\*
- Digital Electronic Metering
- Single or Dual Phone, Cable TV, High-Speed Internet Connections
- Single or Dual 1/2" or 3/4" Silcock with Stainless Steel Handles
- LED Lighting
- · Clear, Blue, and Red Lenses
- \* 20 Amp GFI receptacles are not to be used for shore power.

#### **Dimensions**

#### **HATTERAS LIGHT**

	IN.	IVIIVI
Height:	31	787.4
Width:	7.5	190.5
Depth:	7.5	190.5

#### Receptacle



#### Bus Bar



#### **GFI** Receptacle



#### **Newport Harbor** Mate

#### **Power Pedestal**

The Newport Harbor Mate is our most compact power pedestal with the ability to host a variety of electrical services. Host to a variety of electrical services, contained in a compact yet strong housing, the Newport Harbor Mate is packed with features.



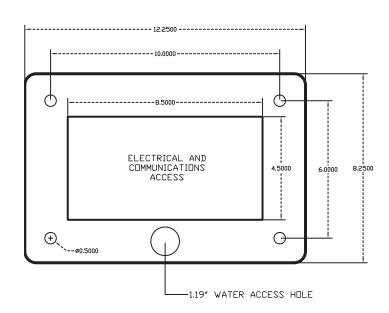




Newport Harbor Mate mounted on dock box

#### **Newport Harbor Mate Base Diagram**

www.marinapower.com



#### Newport Harbor Mate Power Pedestal

- Standard Features
- · Available Options
- Dimensions

#### **Standard Features**

- Heavy Resin Housing with a Two-Part Polyurethane Coating for a UV Resistant, Long-Lasting Finish
- Photocell-Controlled 9 or 14
   Watt Compact Fluorescent
   Twistbulb Light with Amber
   Lens
- Designed to Mount on a Dock Box, Piling, or Stainless Steel Stand
- Copper Bus Bar with a Maximum Rating of 140 Amps
- NEMA 3R Rating
- Circuit Breaker Protection for All Receptacles

#### **Available Options**

- Available with Single, Dual, or Combination of 30A or 50A Receptacles
- 20A/125V GFI Receptacle\*
- Single or Dual Phone, Cable TV, High-Speed Internet Connections
- · Digital Electronic Metering
- Free Standing Pedestal
- · LED Lighting
- Clear, Blue, and Red Lenses

#### **Dimensions**

NEWPORT	<b>HARBOR</b>	MATE

	IN.	MM
Height:	14.5	368.3
Width:	10.5	266.7
Depth:	10.4	264.16

#### NEWPORT HARBOR MATE ON STAND

	IN.	MM
Height:	36	914.4
Width:	10.5	266.7
Depth:	15	381

#### **Backlit Faceplate**



<sup>\* 20</sup> Amp GFI receptacles are not to be used for shore power.

#### **Firehouse**



Created as a complete solution for fire and emergency needs, this pedestal features fire extinguisher storage, an alarm strobe light and an optional life ring. This unit is well-equipped for any marina emergency. The alarm strobe light and siren are automatically activated when the door is open or optional life ring is removed, alerting those nearby to an emergency while also discouraging theft.

# FIRE WXT-NGU-SHER CUL US

#### **Standard Features**

- Photocell-Controlled 14 Watt Compact Fluorescent Twistbulb Light with Red Lens That Provides 360 Degrees of Lighting
- 10 lb. ABC Type Fire Extinguisher
- 316L Stainless Steel Housing that is Powder-Coated with a Polyester Resin
- NEMA 3R Rating

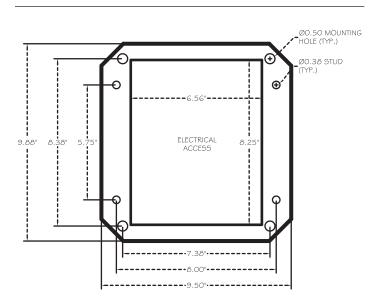
#### **Available Options**

- 24" Life Ring
- 20 lb. ABC Type Fire Extinguisher Available
- Alarm Strobe Light & Siren: Automatically Activated When Door Is Open or Optional Life Ring Is Removed
- LED Lighting
- Clear, Blue, and Amber Lenses

#### Firehouse Base Diagram

#### **Dimensions**

	IN.	MM
Height:	44	1117.6
Width:	9.875	250.6
Depth:	9.875	250.6



Be prepared for a fire emergency at your marina. The Fire Hose Cabinet houses a 100 ft. fire hose, and available optional extinguisher and red illumination.

#### **Standard Features**

- 100 ft. Fire Hose (1.5 in.)
- Heavy 316L Stainless Steel Housing that is Powder-Coated with a Polyester Resin
- NEMA 3R-Rated
- Fully-Gasketed Door

#### **Available Options**

- Red LED Illumination with Backlit "FIRE" Text
- 20lb. Fire Extinguisher with Window for Visibility

#### **Dimensions**

CIDE	HOSE	CARIN	JET

	IN.	MM
Height:	44.06	1119.12
Width:	34.12	866.65
Depth:	9.26	235.20



#### **Mariner**

The Mariner lighting bollard is available from 18 to 36 inches tall and can be used in various applications from marina docks, to landscaped areas, golf courses, and beyond. The Mariner is designed to withstand the harsh marine environments from Alaska to the tropics.

#### **Product Specifications:**

- Can Be Configured with a 7, 9, or 13 Watt Compact Fluorescent Light or LED Lighting
- · Mounting Base and Painted Pole Supplied for Desired
- Custom Colors Available
- 18, 24 or 36 inch total height

#### **Dimensions**

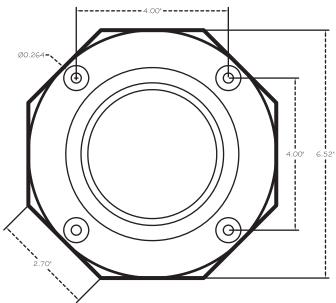
HEAD ASSEMBLY HEIGHT			
	IN.	MM	
7 Watt	7.0	177.8	
9 Watt /13 Watt	8.0	203.2	
LED	a n	228 6	

#### MOUNTING BASE AND POLE

18" - 36"



**Mariner Base Diagram** 



Designed for marinas with transient boat slips, the Smart Start Kiosk from Eaton provides marina managers a simple solution for billing and managing slips.

The "Smart Start" kiosk not only prevents power theft; it also eliminates the need for 24 hour monitoring of the slips. Boaters are able to come in at any time of the day or night and activate a pedestal.

#### **Standard Features**

- Heavy 316L Stainless Steel Housing that is Powder-Coated with a Polyester Resin
- Photocell-Controlled Lighting with Amber Lens
- Programmable Slip Time Blocks
- Programmable Slip Rates
- Printable Receipts
- Controls up to 32 pedestals

#### **Dimensions**

SIM	DT	CT	 В.

	IN.	IVIIVI
Height:	60.05	1525.27
Width:	14.15	359.41
Depth:	14.25	361.95





# MegaYacht Powerpoint

#### Distribution Equipment

Eaton provides the most compact, self-contained mega yacht unit in the industry. The Mega Yacht Powerpoint requires only a single utility feed yet provides single-phase and three-phase power. The Mega Yacht Powerpoint gives your largevessel marina the versatility needed to accommodate yachts from around the world.



MegaYacht Powerpoint

www.marinapower.com



#### MegaYacht Powerpoint

- Standard Features
- · Available Options
- Dimensions

#### **Standard Features**

- Temperature-Controlled Cooling Fans in Transformer Compartment
- Heavy 316L Stainless Steel Housing that is Powder-Coated with a Polyester Resin
- Ventilated Solar Shields to Help Unit Run Cooler in Any Climate
- All receptacles circuit breaker-protected
- LED Lighting
- Copper-Wound, Low-Noise Transformer that is Double Insulated and Epoxy Over-Coated

#### **Available Options**

- 200A-480V-3P Receptacles
- 100% Rated Breakers
- Hard Wiring Bus Bars for All Voltages with Breaker Protection
- Two 3/4" Water Outlets with a Water Meter
- Two Phone, Two CATV, and Two CAT5 High-Speed Internet Connections
- Digital Electronic Meters on All Receptacles
- Primary Circuit Protection
- Wireless Remote Metering for Electric and Water

#### **Dimensions**

MEGA YACHT UNIT - SINGLE SIDED			
	IN.	MM	
Height:	62.8	1595.12	
Width:	50.76	1289.30	
Depth:	36	914.40	

#### MEGA YACHT UNIT - DUAL SIDED IN. MM

	IN.	IVIIVI
Height:	62.8	1595.12
Width:	62.76	1594.10
Depth:	36	914.40

#### Note:

Configuration of the unit will determine the exact dimensions

#### **Substations**

# Distribution Equipment

An essential component to the design of the modern marina, the substation safely and efficiently distributes power throughout the marina. Our substations feature Eaton distribution equipment in a locking, stainless steel enclosure. Through proper utilization of electrical distribution equipment, the marina designer is able to reduce the overall electrical infrastructure costs while increasing efficiency.





**Above:** Dual Panel Substation **Left:** Standard Substation

#### **Panel and Transformer Combinations**

SINGLE-PHASE		THREE-PHASE	
Panel	Transformer	Panel	Transformer
200A	50 KVA	100A	45 KVA
300A	75 KVA	200A	75 KVA
400A	100 KVA	300A	112.5 KVA
600A	150 KVA	400A	150 KVA
700A	167.5 KVA	600A	225 KVA
800A	200 KVA	800A	300 KVA
1000A	250 KVA		
1200A	330 KVA		







**Access Door** 

**Fans** 

#### Substation

- Available Options
- Ventilation
- Dimensions

#### **Available Options**

- Heavy 316L Stainless Steel Housing that is Powder-Coated with a Polyester Resin
- Single-Phase and Three-Phase Models
- Temperature-Controlled Cooling Fans in Transformer Compartment
- Copper-Wound, Low-Noise Transformer that is Double Insulated and Epoxy Over-Coated
- Up to 1200 Amp Main Circuit Breaker
- Ground Fault Monitoring System
- Surge Protection Device to Protect Critical Electrical and Electronic Equipment from Damage by Power Surges

#### **Dimensions**

#### STANDARD SUBSTATION SINGLE PANEL

	IN.	MM
Height:	62.8	1595.12
Width:	50.76	1289.30
Depth:	36	914.40

#### STANDARD SUBSTATION DUAL PANEL

	IN.	MM
Height:	62.8	1595.12
Width:	62.76	1594.10
Depth:	36	914.40

#### 250KVA 3PH/300KVA 1PH SUBSTATION - SINGLE PANEL

	IN.	MM
Height:	68.8	1747.52
Width:	50.76	1289.30
Depth:	36	914.40

#### 250KVA 3PH/300KVA 1PH SUBSTATION - DUAL PANEL

	IN.	MIM
Height:	68.8	1747.52
Width:	62.76	1594.10
Depth:	36	914.40

#### Ventilation

The substation ventilation is designed to optimize air circulation over and around the transformers and through the panel compartment so that the substation operates at lower temperatures.

Substations come equipped with temperature controlled cooling fans for exhausting hot air from the cabinet and solar shield.

#### **Transformers**

# Distribution Equipment

In order to keep wiring costs down, many marina design engineers specify higher voltages on long wire runs, requiring transformers to transform that power down to a usable voltage. Eaton offers enclosed transformers designed to withstand harsh coastal environments. Through proper utilization of electrical distribution equipment, the marina designer is able to reduce the overall electrical infrastructure costs while increasing efficiency.



#### Standard Features

- Copper Terminations
- Copper-Wound, Low-Noise Transformer that is Double Insulated and Epoxy Over-Coated
- All Copper to Copper Connections
- 316L Stainless Steel Enclosure that is Powder-Coated with a Polyester Resin

#### **Available Options**

- Single-Phase: 50 to 500 KVA
- Three-Phase: 45 to 500 KVA
- Dual-Phase Option

#### **Primary Voltages**

- 480WYE 3ø
- 480V 3ø Delta 3-Wire +G
- 480V 1ø 2-Wire + G

#### **Secondary Voltages**

- 127/220V 3øY 4-Wire
- 120/208V 3øY 4-Wire
- 120/240V 1ø 3-Wire

#### Marina Power Distribution Transformer KVA Availabilities

- Single-Phase: 50, 75, 100, 150, 167.5, 200, 250, 330, 500 KVA
- Three-Phase: 45, 75, 112.5, 150, 225, 300, 500 KVA



#### Single-Phase Transformer



One of the many electrical distribution products we offer are Eaton panelboards. All of our panels feature copper buss and bolt-on breakers. Panels can be configured as Main Lugs Only or Main Breaker with branch circuit breakers based on customers' requirements. Our lockable stainless steel enclosures are powder-coated with a polyester resin and NEMA 3R rated.

#### **Standard Features**

- · Copper Bus Bars
- All Exterior Hardware Is Stainless Steel
- 316L Stainless Steel
   Enclosure that is PowderCoated with a Polyester
  Resin
- Main Breaker or Main Lugs up to 1200A
- Branch Breaker 20 to 1200 Amps

#### **Available Options**

- Surge Protection Device (SPD)
- Ground Fault Monitoring





# **Ground Fault Monitor**







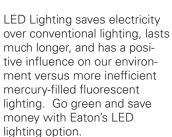
Our ground fault monitoring systems are designed to detect fault currents in the AC shore power system. The Ground Fault Monitor helps reduce the risk of injury or property damage, which may result from stray current. The ground fault monitoring system operates 24 hours a day and provides a visual status.

#### **Standard Features**

- Adjustable Trip Level 10mAmps to 10 Amps
- · Visual Alarm
- · Dry Contacts
- Controllable up to 13 Circuits
- Heavy 316L Stainless Steel Housing that is Powder-Coated with a Polyester Resin

#### **LED Lighting**





LED lighting option is UL certified.





#### Benefits:

- LED uses significantly less current (amps) than a fluorescent bulb uses, costing less to operate
- LED does not contain mercury which can create disposal issues

#### **Available Options:**

 LED upgrade kit available for pedestals already installed







Using the latest technology, Eaton manufactures a line of robust digital electronic submeters providing economical energy management solutions. Our product meets the +/- 2% accuracy requirements by ANSI (American National Standards Institute) and is approved by the state of California. (+/- 1% over full range 0-100 amp with .5 to 1 power factor)

The meter drives an electromechanical counter with a 12 volt pulse providing readings to the tenth of kilowatt hour. Optional output allows for integration of our wireless metering system providing remote kilowatt hour readings.

#### **User Friendly Design**

Eaton's meter is compact and user friendly. The unit will automatically calibrate to current transformers eliminating the need to ensure proper polarity direction during installation. Simple LEDs, both red and green, indicate the line and load condition making trouble shooting a breeze.

#### Wireless System

All of our meters are "wireless capable" to allow for wireless meter reading. This technology

enables the marina to get meter readings from one central location rather than visiting every site to read the counters.

#### **Available Options:**

 Wireless capability available through use of transmitters. Radio Frequency data is sent to software that calculates kilowatt-hour usage per pedestal or per slip user

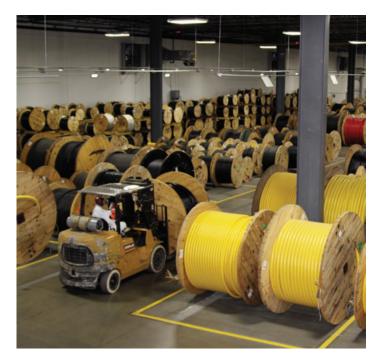
> Surge Protection Device (SPD)



Surge Protection Devices (SPDs) from Eaton are designed to protect solid state equipment from voltage surges caused by poor power or lightning strikes. As boaters have increasingly sophisticated electronics on board their vessels, the need arises to protect them in the event of a surge. The application of SPDs can mitigate problems with sensitive electronic equipment, keeping the equipment and related processes up and running reliably without disruption or damage due to surgerelated events.

#### **Features**

- Common voltages and configurations as well as a variety of surge current capacity ratings from 50 through 400 kA provide application flexibility
- Utilizes thermally protected metal oxide varistor (MOV) technology, which provides both high energy capacity and failsafe operation
- 200 kA short circuit current rating (SCCR)



We can provide all the wiring necessary to complete any project.

#### Wire

- Type G Multiconductor
- THHN/THWN Wire

www.marinapower.com

- Type W Single Conductor
- Type W Multiconductor



# **Eaton Corporation Marina Power and Lighting**

#### **Amperage & Voltage Recommendations**

#### Amperage & Voltage Recommendations

- For sailboats use the minimum column
- For houseboats and fishing boats use the preferred column
- For a mix of sail & power pleasure craft use the satisfactory column
- The voltage rating for a 20, 30, and 50 amp single pole receptacle is 120 volt
- The voltage rating for a 50 amp 2 pole receptacle is 120/240 volt
- The voltage rating for a 100 amp 2 pole 4 wire receptacle is 120/240 volt
- The voltage rating for a 100 amp 3 pole 5 wire receptacle is 120/208 volt
- The 100 amp receptacles are IEC Pin & Sleeve configuration while all others are twistlock

Boat Size	<b>Minimum</b> (Sail Boats)	Satisfactory (Mixed Use)	Preferred (Power Boats)
20' & under	None	1-20 A	1-20 A
21' – 25'	1-30 A	1-30 A	1-30 A
26' – 30'	1-30 A	1-30 A	2-30 A
31' – 37'	1-30 A	2-30 A	2-30 A
38' – 45'	1-30 A	2-30 A	1-30 A & 1-50 A
46' – 50'	1-30 A	1-30 A & 1-50 A	2-50 A
51' – 60'	2-30 A or 1-50A	2-50 A	2-50 A
61' – 70'	2-50 A	2-50 A	1-50 A & 1-100 A
71′ – 80′	2-50 A	1-50 A & 1-100 A	2-100 A
80′ & up	1-100 A	1-50 A &1-100 A	1-100 A Single-Phase 1-100 A Three-Phase

**Marina Sales** 

marinasales@eaton.com

**Marina Parts** 

marinaparts@eaton.com

**Marina Production** 

marinaproduction@eaton.com

Marina Engineering

marinaengineering@eaton.com

Marina Utility Centers

marinautilitycenters@eaton.com

**Marina Substations** 

marinasubstations@eaton.com

tel: 1-800-723-8009 fax: 757-258-8805 www.marinapower.com



