



# MARINE PIN & SLEEVE 100A PLUGS & CONNECTORS

## INSTALLATION INSTRUCTIONS

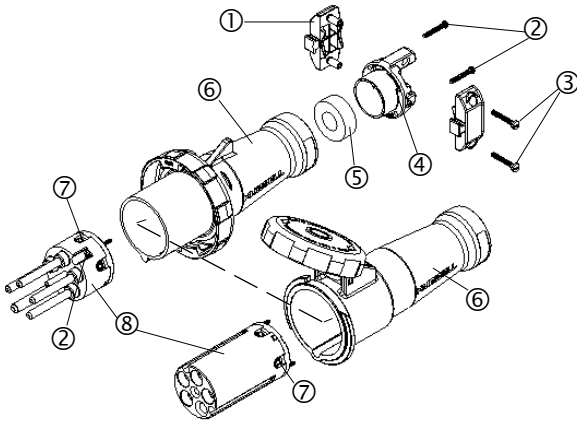
### NOTICE - READ BEFORE INSTALLING THIS DEVICE.

This pin-and-sleeve device conforms to International Electrotechnical Commission Standards IEC 309-1 and 309-2. DO NOT USE non-IEC devices in the same premises as IEC devices, unless assured that no improper mating can occur.

### GENERAL INFORMATION

1. **NOTICE:** For installation by a qualified electrician in accordance with national and local electrical codes and the following instructions.
2. **CAUTION:** RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.
3. **CAUTION:** USE COPPER CONDUCTORS ONLY.
4. Check that the device's type and rating are suitable for the application.
5. Select conductor size from National Electrical Code® Table 400-5 or Canadian Electrical Code Table 12.
6. Use stranded conductors ONLY.
7. **NOTE:** Due to the harshness of a marine environment, it is very important that **ALL** contact surfaces be kept clean and periodically sprayed with a corrosion resistant electrical contact cleaner/lubricant (such as LPS-1 made by Holt Lloyd Corp., Tucker, Georgia).

| DEVICE  | FROM |      |      | TO  |      |      | GRIP RANGE     |
|---------|------|------|------|-----|------|------|----------------|
|         | AWG  | COND | TYPE | AWG | COND | TYPE | MIN / MAX DIA. |
| 100 AMP | #3   | 4    | W    | #1  | 4    | W    | 1.065/ 1.680   |
| 100 AMP | #3   | 5    | W    | #1  | 5    | W    | 1.065/ 1.880   |



### EXPLODED VIEW TYPIFIES DEVICE ASSEMBLY

**NOTE:** Same cord clamp assembly used on both plugs and connectors


- ① Cord clamp
- ② Self-tapping screws
- ③ Clamp screws
- ④ Gland cap
- ⑤ Gland
- ⑥ Housing
- ⑦ Terminal screws
- ⑧ Interior

## **INSTALLATION**

1. Select cord end with proper conductor color orientation that matches terminal location.
2. Shear cord cleanly. Do not strip away cord jacket or remove conductor insulation at this time.
3. Loosen two screws from face of device and remove interior from housing.
4. **Wiring Instructions**
  - a) Slide gland cap (from bag of parts) up cord.
  - b) Select a gland (from bag of parts) with an inside diameter approximately 1/8" (3 mm) larger than cord and slide the gland up cord.
  - c) Slide gland up cord.
  - d) Slide housing up cord.
  - e) Strip cord jacket and conductor insulation as follows.
    - Jacket: 4.5 in (175 mm)
    - Conductors: 1.5 in (40 mm)
 DO NOT TIN CONDUCTORS.
  - f) Twist wire strands together on each conductor.
  - g) Loosen terminal screws. Insert conductors fully into proper terminals as identified in Table 1.
  - h) **NOTE: Crossing one ungrounded conductor (Line) over the grounded conductor (Neutral) may be necessary with five-wire devices.** →
  - i) Torque terminal screws as follows:
    - All terminal screws: 75 lb•in (8.5 N•m)
    - Pilot terminal screw: 20 lb•in (2.5 N•m)
  - j) **TAKE CAUTION THAT THERE ARE NO STRAY WIRE STRANDS.**
5. **Reassemble device**
  - a) Assemble interior by tightening two screws until interior is firmly seated in housing. Screws may continue to turn after interior is seated. This is normal and harmless.
  - b) Slide gland and gland cap down cord to housing and tighten gland cap screws until gland cap is flush with housing.
  - c) Assemble cord clamps to gland cap and torque cord clamp screws to 15 lb•in (1.75 N•m).



**Table 1**

| <b>TERMINAL POLARITY IDENTIFICATION TABLE</b>   |  |
|---|--|
| <b>TERMINAL</b>   | <b>CONDUCTOR</b>   |
| Green,<br>Green Hex Head Screw                                     | Equipment Grounding Conductor<br>(Green or Green/Yellow or Bare) |
| <b>W, White, N</b>  | Grounded Circuit Conductor<br>Neutral (White or Gray)            |
| <b>L<sub>1</sub>, L<sub>2</sub>, L<sub>3</sub></b> or blank<br><b>R<sub>1</sub>, S<sub>2</sub>, T<sub>3</sub></b> or blank<br><b>X, Y, Z</b> or blank | Ungrounded Circuit Conductor,<br>(Line, Hot).                    |
| Pilot   | Control circuit conductor  |