# Watertight Pin and Sleeve **Plugs and Connectors**



PK-A3278-10-00-0C

### 20A, 30A, 60A and 100A

CAUTIONS

### WARNINGS

- TO AVOID FIRE SHOCK, OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE, TEST THAT POWER IS OFF BEFORE SERVICING OR WIRING and ensure connections are made in the same sequence as existing device connections
- These devices conform to IEC standard 60309-1 and 60309-2. The construction is such that each device cannot be mated with another IEC device of different specifications (i.e., voltage, amperage or system rating). For safety purposes, do not use a non-IEC device with these pin and sleeve devices. The specifications for non-IEC devices are established by the individual manufacturers, and may not meet IEC standards. **IMPROPER MATING OF DEVICES MAY** CAUSE FIRE, SHOCK OR DEATH.
- Examine devices periodically for any foreign matter that may contaminate the contacts or the insulation material separating the contacts. Contamination decreases the device's insulation properties. This increases the potential for arcing and possibly decreases the product's life and may cause fire and/or shock hazard. The frequency of inspection depends upon the degree of contamination.
- If you are unsure about any part of these instructions, consult an electrician.
- To be installed and/or used in accordance with electrical codes and regulations (Including NEC/CEC, as applicable). Use this device only with copper or copper clad wire.

### QUICK INSTALL GUIDE

ENGLISH

### **Cleaning Procedures**

WARNING: RISK OF ELECTRIC SHOCK. TURN OFF POWER AT CIRCUIT BREAKER OR FUSE. DO NOT clean this product while undergoing electrical maintenance or service.

CAUTION: Use only chemicals and cleaning solutions that are safe for use with plastics and rubber gaskets. CAUTION: DO NOT direct or concentrate high pressure water or cleaning solution on the enclosure gasket seams, switch handle area or exterior labels.

NOTE: Follow general cleaning procedures established by your facility.

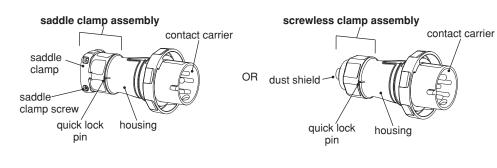
NOTE: This product is certified by NSF® International to NSF/ANSI/3-A 14159-1.

a. Use hose directed water or cleaning solution to remove any collected contaminants from behind the enclosure.

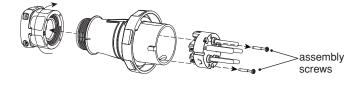
b. Use hose directed water or cleaning solution to remove soil and contaminants from the exterior surfaces of the enclosure

c. Use a dry clean cloth to wipe away any excess water

# 20A and 30A Plug Installation

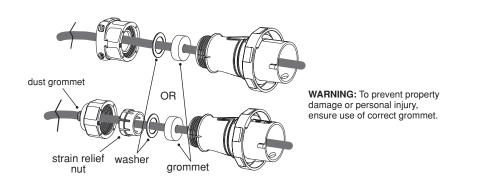


# **1** Unscrew assembly and contact carrier.



### **2.** Thread wire.

Select grommet (Table 1) thread clamp assembly, washer, grommet and housing onto selected wire (Table 3). NOTE: If using screwless clamp assembly, select strain relief nut first (Table 2)



## **3.** Wire.

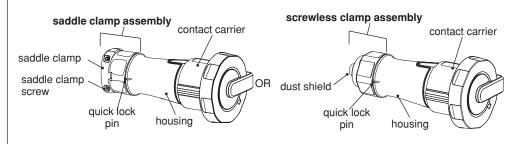
Cut and strip cable jacket and conductors (Table 4). WARNING: TO AVOID FIRE, SHOCK OR DEATH, connections must be made in the same sequence as existing device connections

Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. NOTE: Reference torque value (Table 6). Allen key included.

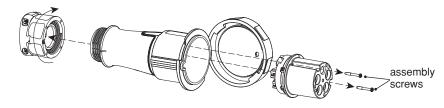
NOTE: Line up key with key notch.

**4.** Reconnect contact carrier. Tighten assembly screws (Table 6).

# 20A and 30A Connector Installation

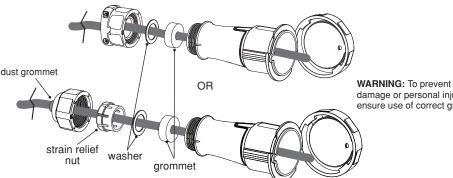


## **1** Unscrew assembly and contact carrier.



### Thread wire.

Select grommet (Table 1) thread clamp assembly, washer, grommet and housing onto selected wire (Table 3). NOTE: If using screwless clamp assembly, select strain relief nut first (Table 2)



WARNING: To prevent property damage or personal injury, ensure use of correct grommet.

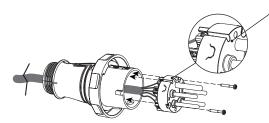
**NOTE**: Line up key with key notch.

### 3. Wire.

Cut and strip cable jacket and conductors (Table 4). WARNING: TO AVOID FIRE, SHOCK OR DEATH, connections must be made in the same sequence as

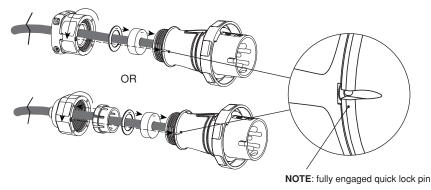
existing device connections Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. NOTE: Reference torque value (Table 6). Allen key included.

**4.** Reconnect contact carrier. Tighten assembly screws (Table 6).



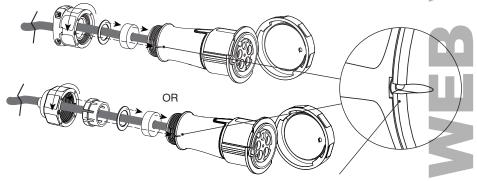
### 5. Reassemble

Slide grommet and washer down and seat firmly into housing. Slide saddle clamp assembly or screwless clamp assembly onto housing and screw on until quick lock pin fully engages. Tighten clamp screws (Table 6)



## 5. Reassemble.

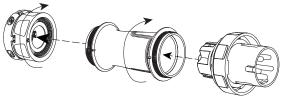
Slide grommet and washer down and seat firmly into housing. Slide saddle clamp assembly or screwless clamp assembly onto housing and screw on until quick lock pin fully engages. Tighten clamp screws (Table 6)



NOTE: fully engaged quick lock pin

# 60A and 100A Plug Installation

1. Unscrew saddle clamp assembly and contact carrier.



2. Thread wire.

Select grommet (Table 1) thread clamp assembly, washer, grommet and housing onto selected wire (Table 3). WARNING: To prevent property damage or personal injury, ensure use of correct grommet.



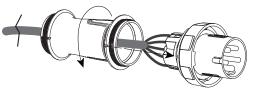
**3.** Wire.

Cut and strip cable jacket and conductors (Table 4).

WARNING: TO AVOID FIRE, SHOCK OR DEATH, connections must be made in the same sequence as existing device connections.

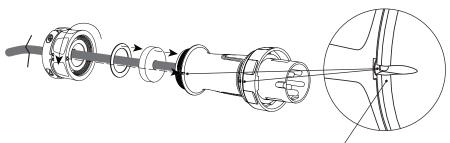
Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. NOTE: Reference torque value (Table 6). Allen key included.

**4.** Reconnect contact carrier.



### 5 Reassemble.

Slide grommet and washer down and seat firmly into housing. Slide saddle clamp assembly or screwless clamp assembly onto housing and screw on until quick lock pin fully engages. Tighten clamp screws (Table 6)



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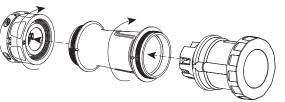
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3

| 60A and | <b>100A Connector I</b> | Installation |
|---------|-------------------------|--------------|
|---------|-------------------------|--------------|

1. Unscrew saddle clamp assembly and contact carrier.



### 2. Thread wire.

Select grommet (Table 1) thread clamp assembly, washer, grommet and housing onto selected wire (Table 3). WARNING: To prevent property damage or personal injury, ensure use of correct grommet.



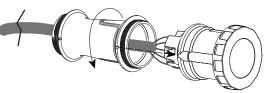
# **3.** Wire.

Cut and strip cable jacket and conductors (Table 4).

WARNING: TO AVOID FIRE, SHOCK OR DEATH, connections must be made in the same sequence as existing device connections. Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. **NOTE**: Reference

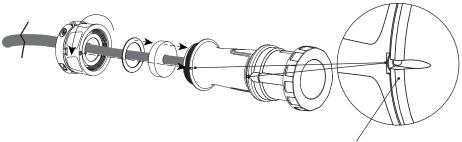
torque value (Table 6). Allen key included.

## 4. Reconnect contact carrier.



### 5 Reassemble.

Slide grommet and washer down and seat firmly into housing. Slide saddle clamp assembly or screwless clamp assembly onto housing and screw on until quick lock pin fully engages. Tighten clamp screws (Table 6).



NOTE: fully engaged quick lock pin

| 5 т                    | erminal identification Chart              |
|------------------------|---|
| $\int$ and green color | Equipment ground conductor                |
| N and white color      | Grounded circuit conductors (neutral)     |
| L1, L2, L3             | Ungrounded circuit conductors (line, hot) |
| Pilot                  | Control circuit conductor.                |

| 6      | Screw 1            | Fightening Gui           | de in-Ibs (N-m     | )                     |
|--------|--------------------|--------------------------|--------------------|-----------------------|
| Device | Terminal<br>Screws | Pilot Terminal<br>Screws | Assembly<br>Screws | Cable Clamp<br>Screws |
| 20A    | 00 (0.00)          | NI/A                     | 0.(0.0)            |                       |
| 30A    | 20 (2.26)          | N/A                      | 8 (0.9)            | 10 (1.13)             |
| 60A    | 50 (5.05)          | 00 (0 00)                |                    |                       |
| 100A   | 50 (5.65)          | 20 (2.26)                | N/A                | 15 (1.69)             |

### 3 20A 3-4 Wire Grommet Usage 1 Grommet Marking Wire Diameter Wire Diameter Amperage (in) (mm) 0.300 - 0.425 7.620 -10.795 V 0.425 - 0.550 10.795 -13.970 W 20A 0.550 - 0.675 13.970 - 17.145 х 0.675 - 0.860 17.145 - 21.844 Υ Wire & 30A 3,4, 5 Wire Gro Usage 0.325 - 0.500 8.255 - 12.700 Т 0.500 - 0.625 12.700 - 15.875 S 15.875 - 19.050 0.625 - 0.750 R 20A & 30A 0.750 - 0.875 19.050 - 22.225 Q 0.875 - 1.000 22.225 - 25.400 Р 1.000 - 1.125 25.400 - 28.575 0 60A Grommet Usage 0.600 - 0.725 15.240 - 18.415 Ν 0.725 - 0.850 18.415 - 21.590 М 0.850 - 0.975 21.590 - 24.765 L 0.975 - 1.163 24.765 - 29.540 60A Κ 1.163 - 1.350 29.540 - 34.290 J 1.350 - 1.475 34.290 - 37.465 1 1.475 - 1.600 37.465 - 40.640 Н 100A Grommet Usage 0.725 - 0.850 18.415 - 21.590 А 0.850 - 0.975 21.590 - 24.765 В 0.975 - 1.163 24.765 - 29.540 С 1.163 - 1.350 29.540 - 34.290

| Device |     | From |           |     | То   |        | Grip Range<br>Min./Max. | Grip Range<br>Min./Max. |
|--------|-----|------|-----------|-----|------|--------|-------------------------|-------------------------|
| Device | AWG | COND | TYPE      | AWG | COND | TYPE   | Wire Diam. (in)         | Wire Diam. (mm)         |
|        |     | 3    |           |     | 3    |        |                         |                         |
| 20A    | #14 | 4    |           | #10 | 4    | S      | 0.330/0.830             | 8/21                    |
|        |     | 5    | s         |     | 5    |        |                         |                         |
|        |     | 3    | 5         |     | 3    |        |                         |                         |
| 30A    | #12 | 4    |           | #8  | 4    | S or W | 0.580/1.125             | 15/29                   |
|        |     | 5    |           |     | 5    |        |                         |                         |
|        |     | 3    |           |     | 3    |        |                         |                         |
| 60A    | #8  | 4    | S or<br>W | #2  | 4    |        | 0.875/1.450             | 22/37                   |
|        |     | 5    |           |     | 5    | 14/    |                         |                         |
|        |     | 3    |           |     | 3    | W      |                         |                         |
| 100A   | #6  | 4    | w         | #1  | 4    |        | 0.725/1.890             | 18/48                   |
|        |     | 5    |           |     | 5    |        |                         |                         |

Wire Size

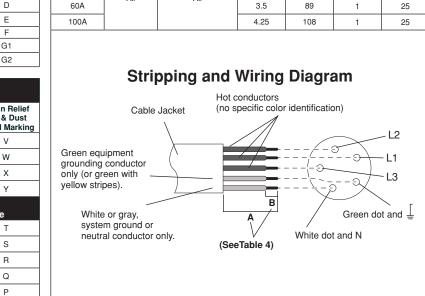
| )     |           | Cable and W | ire Strippin | g Guide   |        |          |
|-------|-----------|-------------|--------------|-----------|--------|----------|
| evice | No. Wires | Conductor   | Cable Ja     | acket (A) | Condu  | ctor (B) |
| evice | NO. WITES | Conductor   | Inches       | mm        | Inches | mm       |
| 20A   |           |             | 1.375        | 35        | 0.375  | 10       |
| 80A   | All       | All         | 1.625        | 41        | 0.625  | 16       |
| 60A   | All       | All         | 3.5          | 89        | 1      | 25       |

### LIMITED 5 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under ormal and proper use for three years from the purchase Leviton's only obligation is to correct such defects by repair or replacement, at its option. For details visit www.leviton.com or call 1-800-824-3005. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed impro perly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions.

| TUUA | 1.350 - 1.475 | 34.290 - 37.465 | E  |
|------|---------------|-----------------|----|
|      | 1.475 - 1.600 | 37.465 - 40.640 | F  |
|      | 1.600 - 1.775 | 40.640 - 45.085 | G1 |
|      | 1.775 - 1.950 | 45.085 - 49.530 | G2 |

| 20A 3-4 Wire Strain Relief Nut<br>& Dust Shield Usage                      |                       |                       |   |  |  |  |
|--|-----------------------|-----------------------|---|--|--|--|
| Amperage   | Wire Diameter<br>(in) | Wire Diameter<br>(mm) | Strain Relief<br>Nut & Dust<br>Shield Marking |  |  |  |
|  | 0.300 - 0.425         | 7.620 -10.795         | V   |  |  |  |
| 20A  | 0.425 - 0.550         | 10.795 -13.970        | w   |  |  |  |
| 20A  | 0.550 - 0.675         | 13.970 - 17.145       | х   |  |  |  |
|  | 0.675 - 0.860         | 17.145 - 21.844       | Y   |  |  |  |
| 20 A 5 Wire & 30A 3, 4 and 5 Wire<br>Strain Relief Nut & Dust Shield Usage |                       |                       |   |  |  |  |
|  | 0.325 - 0.500         | 8.255 - 12.700        | Т   |  |  |  |
|  | 0.500 - 0.625         | 12.700 - 15.875       | S   |  |  |  |
| 20A & 30A  | 0.625 - 0.750         | 15.875 - 19.050       | R   |  |  |  |
| 20A & 30A  | 0.750 - 0.875         | 19.050 - 22.225       | Q   |  |  |  |
|  | 0.875 - 1.000         | 22.225 - 25.400       | Р   |  |  |  |
|  | 1.000 - 1.125         | 25.400 - 28.575       | 0   |  |  |  |



There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

### FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1 800 405-5320.

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For Technical Assistance Call: 1-800-824-3005 (USA Only) or 1-800-405-5320 (Canada Only) www.leviton.com

NOTE: fully engaged quick lock pin