# Watertight Pin and Sleeve Plugs and Connectors

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PK-A3278-10-00-0B

20A, 30A, 60A and 100A

#### WARNINGS

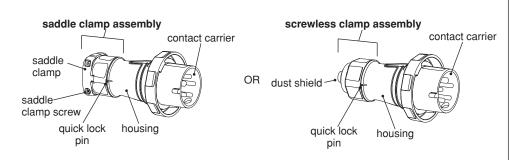
- TO AVOID FIRE SHOCK, OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE, TEST THAT POWER IS OFF BEFORE SERVICING OR WIRING and ensure connections are made in the same sequence as existing device connections.
- These devices conform to IEC standard 60309-1 and 60309-2. The construction is such that
  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.

#### CAUTIONS

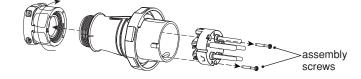
- Examine devices periodically for any foreign matter that may contaminate the contacts or the insulation material separating the contacts. Contamination decreases the device's insulation properties. This increases the potential for arcing and possibly decreases the product's life and may cause fire 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

# 20A and 30A Plug Installation

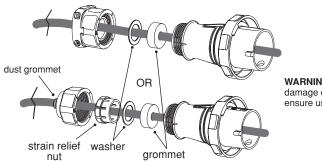


1. Unscrew assembly and contact carrier.



#### 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).



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

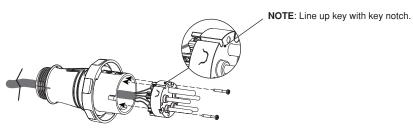
## **3.** Wire

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.

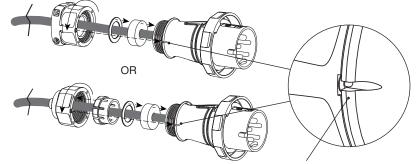
Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. **NOTE**: Reference torque value (Table 6). Allen key included.

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



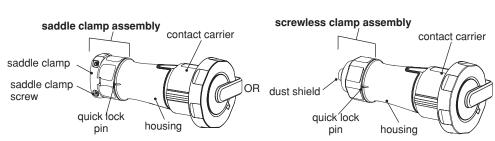
# **5.** Reassemble.

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).

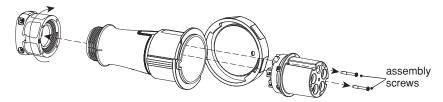


NOTE: fully engaged quick lock pin

# 20A and 30A Connector Installation

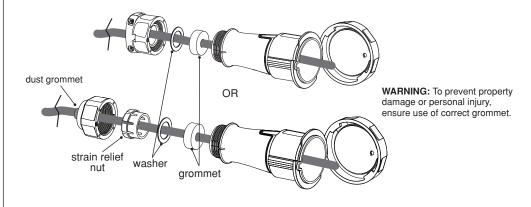


1. Unscrew assembly and contact carrier.



#### 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).



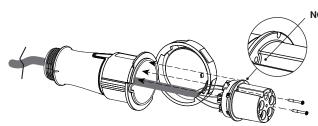
## **3.** Wire

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.

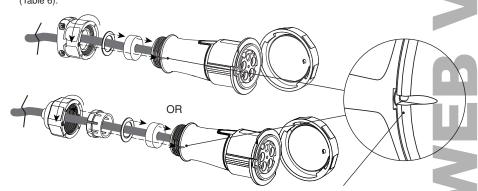
Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. **NOTE**: Reference torque value (Table 6). Allen key included.

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



NOTE: Line up key with key note

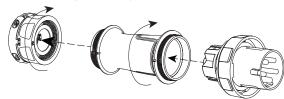
Reassemble.
 Slide grommet and washer down and seat firmly into housing. Slide saddle clamp assembly or screwless clamp assembly onto housing and screw on until quick lock pin fully engages. Tighten clamp screws



NOTE: fully engaged quick lock pin

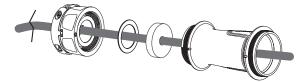
# 60A and 100A Plug Installation

1. Unscrew saddle clamp assembly and contact carrier.



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.



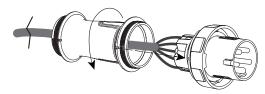
**3.** Wire.

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.

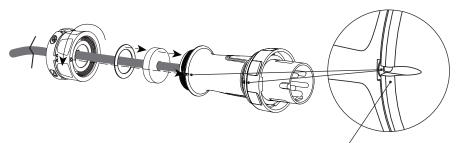
Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. NOTE: Reference torque value (Table 6). Allen key included.

**4.** Reconnect contact carrier.



Reassemble.

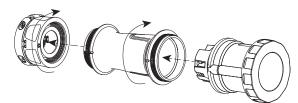
Slide grommet and washer down and seat firmly into housing. Slide saddle clamp assembly or screwless clamp assembly onto housing and screw on until quick lock pin fully engages. Tighten clamp screws



NOTE: fully engaged quick lock pin

# 60A and 100A Connector Installation

 $oldsymbol{1}$  . Unscrew saddle clamp assembly and contact carrier.



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.

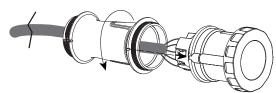
Cut and strip cable jacket and conductors (Table 4).

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

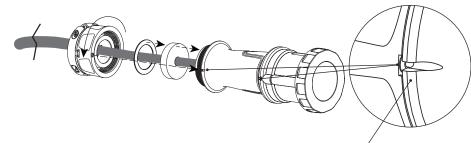
torque value (Table 6). Allen key included.

4. Reconnect contact carrier.



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



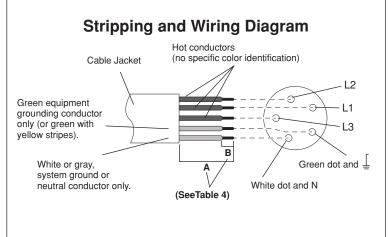
NOTE: fully engaged quick lock pin

20A \$\begin{array}{c c c c c c c c c c c c c c c c c c c	1 20A 3-4 Wire Grommet Usage						
20A & 30A & 30A & 20A & 30A &	ire Diameter (mm)	Grommet Marking					
20A    0.550 - 0.675    0.675 - 0.860    17  20A 5 Wire & 30A 3,4, § 0.325 - 0.500    8  0.500 - 0.625    12  0.625 - 0.750    15  0.875 - 1.000    22  1.000 - 1.125    50  60A Grom  0.600 - 0.725    15  0.725 - 0.850    16  0.850 - 0.975    11  0.975 - 1.163    24  1.163 - 1.350    25  1.00A Grom  0.725 - 0.850    1.350 - 1.475    4  1.00A Grom  0.725 - 0.850    1.350 - 1.475    1.475 - 1.600    37  100A Grom  1.163 - 1.350    25  1.350 - 1.475    1.475 - 1.630    37  1.475 - 1.630    38  1.350 - 1.475    34  1.163 - 1.350    25  1.350 - 1.475    34  1.475 - 1.600    37	.620 -10.795	٧					
0.550 - 0.675	0.795 -13.970	w					
20A 5 Wire & 30A 3,4,5  0.325 - 0.500 8  0.500 - 0.625 12  0.625 - 0.750 15  0.750 - 0.875 19  0.875 - 1.000 22  1.000 - 1.125 25  60A Gromi  0.600 - 0.725 15  0.725 - 0.850 18  0.850 - 0.975 21  0.975 - 1.163 24  1.163 - 1.350 25  1.350 - 1.475 34  1.475 - 1.600 37  100A Grom  0.725 - 0.850 18  0.850 - 0.975 21  1.475 - 1.600 37  100A Grom  10A Grom  10A Grom  10B	.970 - 17.145	Х					
0.325 - 0.500 8 0.500 - 0.625 12 0.625 - 0.750 15 0.750 - 0.875 15 0.875 - 1.000 22 1.000 - 1.125 25  60A Grom 0.600 - 0.725 15 0.725 - 0.850 18 0.850 - 0.975 21 0.975 - 1.163 24 1.163 - 1.350 25 1.350 - 1.475 34 1.475 - 1.600 37  100A Grom 0.725 - 0.850 18 0.850 - 0.975 21 1.475 - 1.600 37	'.145 - 21.844	Υ					
0.500 - 0.625 12 0.625 - 0.750 15 0.750 - 0.875 19 0.875 - 1.000 22 1.000 - 1.125 25  60A Grom 0.850 - 0.975 21 0.850 - 0.975 21 1.163 - 1.350 25 1.350 - 1.475 34 1.475 - 1.600 37  100A Grom 0.725 - 0.850 18 0.875 - 1.63 24 1.163 - 1.350 25 1.350 - 1.475 34 1.475 - 1.600 37 100A Grom 0.725 - 0.850 18 0.850 - 0.975 21 0.975 - 1.163 24 1.475 - 1.600 37	Wire Grom	met Usage					
20A & 30A  0.625 - 0.750	255 - 12.700	Т					
20A & 30A  0.750 - 0.875	.700 - 15.875	S					
0.750 - 0.875	.875 - 19.050	R					
1.000 - 1.125   25  60A Grom  0.600 - 0.725   15  0.725 - 0.850   18  0.850 - 0.975   21  1.163 - 1.350   25  1.350 - 1.475   34  1.475 - 1.600   37  100A Grom  0.725 - 0.850   18  0.850 - 0.975   21  0.975 - 1.163   24  1.163 - 1.350   25  1.350 - 1.475   34  1.163 - 1.350   25  1.350 - 1.475   34  1.163 - 1.350   25  1.350 - 1.475   34  1.475 - 1.600   37	.050 - 22.225	Q					
60A Grom  0.600 - 0.725	.225 - 25.400	Р					
0.600 - 0.725	.400 - 28.575	0					
0.725 - 0.850	met Usage						
0.850 - 0.975	.240 - 18.415	N					
0.975 - 1.163	.415 - 21.590	М					
1.163 - 1.350   25 1.350 - 1.475   34 1.475 - 1.600   37 100A Grom 0.725 - 0.850   18 0.850 - 0.975   21 0.975 - 1.163   24 1.163 - 1.350   25 1.350 - 1.475   34 1.475 - 1.600   37	.590 - 24.765	L					
1.350 - 1.475 34 1.475 - 1.600 37 100A Grom 0.725 - 0.850 18 0.850 - 0.975 21 0.975 - 1.163 24 1.163 - 1.350 28 1.350 - 1.475 34 1.475 - 1.600 37	.765 - 29.540	К					
1.475 - 1.600 37  100A Grom 0.725 - 0.850 18 0.850 - 0.975 21 0.975 - 1.163 24 1.163 - 1.350 29 1.350 - 1.475 34 1.475 - 1.600 37	.540 - 34.290	J					
100A Grom 0.725 - 0.850	.290 - 37.465	I					
100A 0.725 - 0.850 18 0.850 - 0.975 21 0.975 - 1.163 24 1.163 - 1.350 29 1.350 - 1.475 34 1.475 - 1.600 37	'.465 - 40.640	Н					
100A 0.850 - 0.975 21 0.975 - 1.163 24 1.163 - 1.350 29 1.350 - 1.475 34 1.475 - 1.600 37	met Usage						
100A 0.975 - 1.163	.415 - 21.590	Α					
1.163 - 1.350 29 1.350 - 1.475 34 1.475 - 1.600 37	.590 - 24.765	В					
1.350 - 1.475 34 1.475 - 1.600 37	.765 - 29.540	С					
1.350 - 1.475 34 1.475 - 1.600 37	.540 - 34.290	D					
	.290 - 37.465	E					
1 1 600 - 1 775   40	.465 - 40.640	F					
1.000 1.770 40	.640 - 45.085	G1					
1.775 - 1.950 45	.085 - 49.530	G2					

2		ire Strain Relie					
Amperage	Wire Diameter (in)	St Shield Usag Wire Diameter (mm)	Strain Relief Nut & Dust Shield Marking				
20A	0.300 - 0.425	7.620 -10.795	V				
	0.425 - 0.550	10.795 -13.970	W				
	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 Strain Relief Nut & Dust Shield Usage							
	0.325 - 0.500	8.255 - 12.700	Т				
20A & 30A	0.500 - 0.625	12.700 - 15.875	S				
	0.625 - 0.750	15.875 - 19.050	R				
	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				

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

4 Cable and Wire Stripping Guide							
No Wires	Conductor	Cable Jacket (A)		Conductor (B)			
Device No. Wires		Inches	mm	Inches	mm		
- All	All	1.375	35	0.375	10		
		1.625	41	0.625	16		
		3.5	89	1	25		
		4.25	108	1	25		
	No. Wires	No. Wires Conductor	No. Wires         Conductor         Cable January           Inches         1.375           All         All           3.5	No. Wires         Conductor         Cable Jacket (A)           Inches         mm           1.375         35           1.625         41           3.5         89	No. Wires         Conductor         Cable Jacket (A)         Conductor           Inches         mm         Inches           1.375         35         0.375           1.625         41         0.625           3.5         89         1		



5 Terminal identification Chart				
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 Tightening Guide in-lbs (N-m)						
Device	Terminal Screws	Pilot Terminal Screws	Assembly Screws	Cable Clamp 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)	N/A				
100A	50 (5.65)	20 (2.26)		15 (1.69)			

## **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 normal 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.

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.