# Watertight Pin and Sleeve Plugs and Connectors

LEVIION<sub>®</sub>

**19S and Connectors**20A, 30A, 60A and 100A

#### WARNINGS

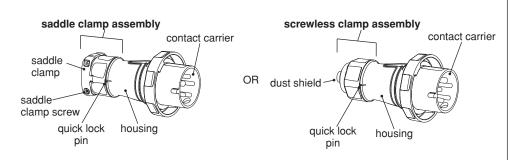
- TO AVOID FIRE SHOCK, OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE, TEST THAT POWER IS OFF BEFORE SERVICING OR WIRING and ensure connections are made in the same sequence as existing device connections.
- These devices conform to IEC standard 60309-1 and 60309-2. The construction is such that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

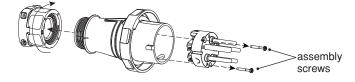
- Examine devices periodically for any foreign matter that may contaminate the contacts or the insulation material separating the contacts. Contamination decreases the device's insulation properties. This increases the potential for arcing and possibly decreases the product's life and may cause fire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



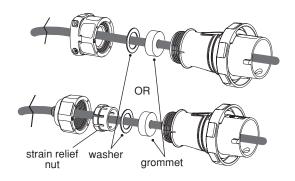
1. Unscrew assembly and contact carrier.



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

Remove washer from housing, 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).



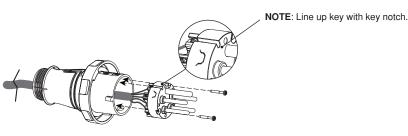
# **3.** Wire.

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.

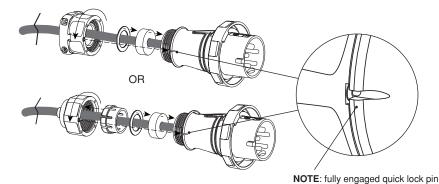
Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. **NOTE**: Reference torque value (Table 6). Allen key included.

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

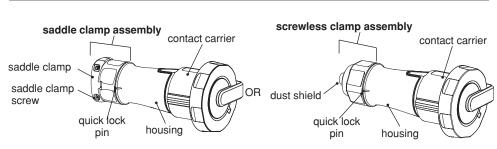


## **5.** Reassemble.

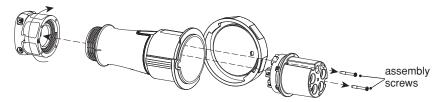
Slide grommet and washer down and seat firmly into housing. Slide saddle clamp assembly or screwless clamp assembly onto housing and screw on **until quick lock pin fully engages**. Tighten clamp screws (Table 6).



# 20A and 30A Connector Installation



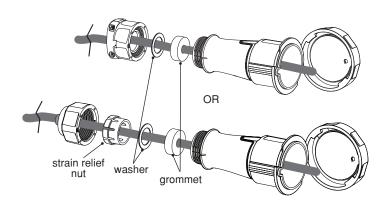
1. Unscrew assembly and contact carrier.



#### 2. Thread wire.

Remove washer from housing, 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).



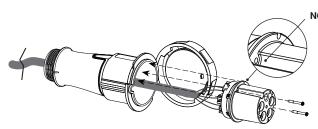
#### 3. Wire

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.

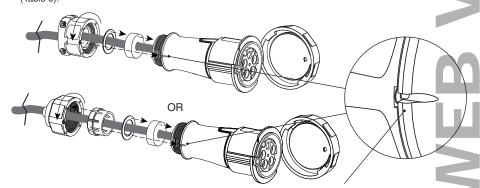
4. Reconnect contact carrier. Tighten assembly screws (Table 6).



NOTE: Line up key with key not

■ 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.

Remove washer from housing, select grommet (Table 1) thread clamp assembly, washer, grommet and housing onto selected wire (Table 3).



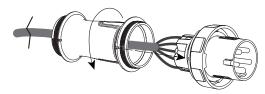
**3.** Wire.

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.

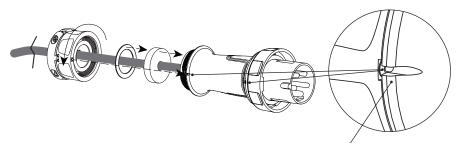
Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. NOTE: Reference torque value (Table 6). Allen key included.

**4.** Reconnect contact carrier.



Reassemble.

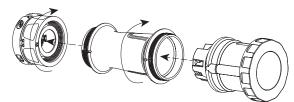
Slide grommet and washer down and seat firmly into housing. Slide saddle clamp assembly or screwless clamp assembly onto housing and screw on until quick lock pin fully engages. Tighten clamp screws



NOTE: fully engaged quick lock pin

# 60A and 100A Connector Installation

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



Thread wire.

Remove washer from housing, select grommet (Table 1) thread clamp assembly, washer, grommet and housing onto selected wire (Table 3).



**3.** Wire.

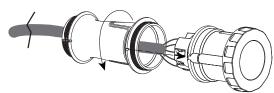
Cut and strip cable jacket and conductors (Table 4).

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

existing device connections.

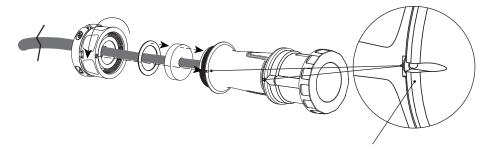
Connect wires (Table 5 and Stripping and Wiring Diagram) and tighten terminal screws. **NOTE**: Reference torque value (Table 6). Allen key included.

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

1	20A 3-4 Wire Grommet Usage					
Amperage	Wire Diameter (in)	Wire Diameter (mm)	Grommet 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	Υ			
20A 5	Wire & 30A 3,4	1, 5 Wire Grom	met 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			
	60A Gro	mmet Usage				
	0.600 - 0.725	15.240 - 18.415	N			
	0.725 - 0.850	18.415 - 21.590	М			
	0.850 - 0.975	21.590 - 24.765	L			
60A	0.975 - 1.163	24.765 - 29.540	К			
	1.163 - 1.350	29.540 - 34.290	J			
	1.350 - 1.475	34.290 - 37.465	I			
	1.475 - 1.600	37.465 - 40.640	Н			
100A Grommet Usage						
	0.725 - 0.850	18.415 - 21.590	Α			
	0.850 - 0.975	21.590 - 24.765	В			
100A	0.975 - 1.163	24.765 - 29.540	С			
	1.163 - 1.350	29.540 - 34.290	D			
	1.350 - 1.475	34.290 - 37.465	E			
	1.475 - 1.600	37.465 - 40.640	F			

20A 3-4 Wire Strain Relief Nut & Dust Shield Usage							
Amperage	Wire Diameter (in)	Wire Diameter (mm)	Strain Relief Nut & Dust 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	Υ				
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				
	0.500 - 0.625	12.700 - 15.875	S				
004 9 004	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				

3					Wire Sizes			
Device		From		То		Grip Range Min./Max.	Grip Range Min./Max.	
Devide	AWG	COND	TYPE	AWG	COND	TYPE	Wire Diam. (in)	Wire Diam. (mm)
		3		#10	3	S	0.330/0.830	8/21
20A	#14	4	S		4			
		5			5			
		3	3	#8	3	S or W	0.580/1.125	15/29
30A	#12	4			4			
		5			5			
		3	_		3		0.875/1.450	22/37
60A	#8	4	S or W	#2	4	. w -		
		5			5			
		3	W	#0	3		0.725/1.600	18/41
100A	#6	4			4			
		5			5			

4		Cable and W	ire Strippin	g Guide		
Davisa	No. Wires	Conductor	Cable Jacket (A)		Conductor (B)	
Device			Inches	mm	Inches	mm
20A			1.375	35	0.375	10
30A	A.II		1.625	41	0.625	16
60A	All		3	76	1	25
100A			3.5	89	1	25

Stripping and Wiring Diagram
Green equipment grounding conductor only (or green with yellow stripes).  White or gray, system ground or neutral conductor only.  Hot conductors (no specific color identification)  L2  L1  Green equipment grounding conductor only (or green with yellow stripes).  White or gray, system ground or neutral conductor only.  (See Table 4)  White dot and N

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)	N/A 20 (2.26)	8 (0.9)	10 (1.13)	
30A	20 (2.26)				
60A	50 (5.05)		N/A		
100A	50 (5.65)			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 Ltd 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.