## INSTALLATION INSTRUCTIONS

### **Indoor Load Center Enclosure**

# IMPORTANT SAFETY INSTRUCTIONS - READ ALL INSTRUCTIONS BEFORE USING.



PK-A3220-10-00-0C

### WARNINGS

- TO AVOID FIRE, SHOCK, OR DEATH, TURN OFF POWER SUPPLYING THIS EQUIPMENT AND CONFIRM POWER IS OFF before installing, removing, or servicing this equipment.
- TO AVOID RISK OF FIRE, check all wiring and ensure all circuit breakers are installed in the proper position before energizing the panel.
- Before providing power to the load center, check all electrical connections and confirm that the wiring is correct.
- This equipment MUST BE installed and serviced by an electrician.
- To be installed and/or used in accordance with electrical codes and regulations.
- Leviton circuit breakers MUST BE used with Leviton circuit breaker enclosures.
- Use ONLY approved fittings and clamps to avoid damage to wires
- Replace all doors and covers before connecting power to this equipment.
- SAVE THESE INSTRUCTIONS.

### LIMITED PRODUCT WARRANTY

For Leviton's limited product warranty, go to www.leviton.com. For a printed copy of the warranty you may call 1-800-323-8920. Patents covering this product, if any, can be found on Leviton.com/patents.

Fig. 1

### INSTALLATION

WARNING: TO AVOID FIRE, SHOCK, OR DEATH, TURN OFF POWER SUPPLYING THIS EQUIPMENT AND CONFIRM POWER IS **OFF** before installing, removing, or servicing this equipment.

### Step 1: Enclosure Knockouts

NOTE: Before removing any knockouts from the enclosure, consult the local electrical code to determine the knockout requirements.

- a. To remove knockouts (A), first strike the center of knockout.
- b. Pry each ring (B) up, one at a time, and grip both ends with a pair of pliers.
- Use the pliers to bend the rings (B), until they disconnect from the enclosure (fig. 1).

NOTE: When using the service entrance compartment cover (C), utilize knockouts that will allow access to the service entrance compartment. Avoid the entrance of phase wires (H), neutral (I), and ground (J) conductors outside of the compartment area, to prevent interference between them and the cover.

# Step 2: Enclosure Mounting

### **Surface Mounting**

NOTE: Leviton® load centers can be inverted for bottom feed applications.

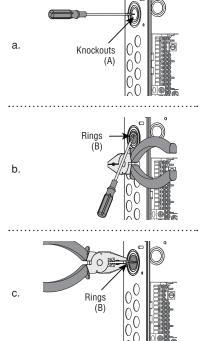
- a. Remove the service entrance compartment cover (C) by unscrewing the two (x2) **screws (O)** securing it to the enclosure *(fig. 2* NOTE: The service entrance compartment cover (C) is not required for main lug load center enclosures.
- b. Keyholes (D) at the top and bottom of the enclosure are provided to assist in the alignment and leveling of the enclosure (fig. 3).
- c. Temporary screws or nails (not provided) should be used in these keyholes during alignment and leveling.
- d. Four (x4) mounting holes (E) have been precut in the back of the enclosure for ease of installation (fig. 3).
- e. Use screws or nails (not provided) in these four (x4) mounting holes (E) to secure the enclosure to the wall.
- f. Remove the temporary screws or nails that were used to align and level the enclosure through the keyholes (D).

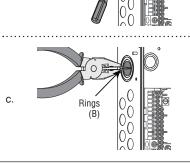
### Flush Mounting

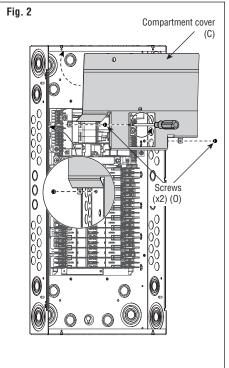
NOTE: Leviton load centers can be inverted for bottom feed applications.

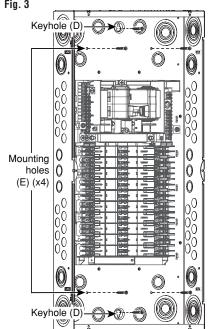
- a. Remove the service entrance compartment cover (C) by unscrewing the two (x2) **screws (O)** securing it to the enclosure *(fig. 2).* **NOTE:** The **service entrance compartment cover (C)** is not required for main lug load center enclosures.
- b. Four (x4) mounting slots (F) have been precut on the side of the enclosure for installation between studs.
- c. Pierce the foil tape (G) on the side of the enclosure, with a mounting screw or nail.
- d. If using 1/2 inch sheetrock, align the embossed (1/2) line with the front of the stud to achieve optimal flush mounting.
- e. Use the mounting slots (F) on both sides of the enclosure to mount the enclosure with screws or nails (not provided) (fig. 4).

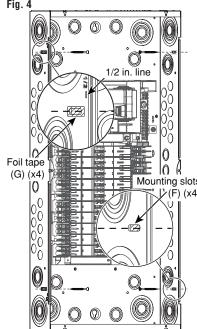
# b Fig. 3











# Mounting slots

### Step 3: Phase, Neutral, and Ground Conductors

WARNING: Use ONLY approved fittings and clamps to avoid damage to wires.

- a. Bring the phase wires (H), neutral, (I) and ground (J) conductors into the enclosure through the predetermined knockouts.
- b. Determine whether or not the application requires the use of a main circuit breaker (K) (fig. 5), or if main lugs (L) (fig. 6) can be used based on the local electrical codes
- c. Connect the phase wires (H), neutral (I), and ground (J) conductors to appropriate terminals and torque to spec in the terminations table (fig. 5 or 6).
- d. If installing with a main circuit breaker (K), also install the two (x2) terminal covers (M) that have been provided (fig. 7).
- e. When installing this enclosure as the service entrance, the bonding strap (N) MUST remain installed (fig. 8).
- f. When installing this enclosure as a sub panel, REMOVE the bonding strap (N) by unscrewing the two (x2) mounting screws (fig. 9). With the bonding strap removed, ground conductors must be terminated on the ground bar, and neutral conductors must be terminated on the neutral bar.

CAUTION: If the load center has been installed with a main breaker continue with steps g and h. Steps g and h do not apply to main lug load center enclosures.

- g. Install the service entrance compartment cover (C) by placing the top edge under the enclosure flange (P) (fig. 10).
- h. Align cover with the two (x2) screw holes and torque the screws (O) to 20 lb-ins.

### Step 4: Branch Circuit Breakers

**WARNING:** Leviton circuit breakers **MUST BE** used with a Leviton circuit breaker enclosures.

a. Strip and connect the load power and load neutral wires to the load terminals (Q) and ground wire to the ground bus (R) of the circuit breaker enclosure (fig. 11). Strip wires and torque load terminals to spec in the terminations table.

**NOTE:** Ensure that the main breaker is in the OFF position before installing any branch circuit breakers.

**NOTE:** Ensure that all branch circuit breakers are in the OFF position before installing into the panel.

WARNING: TO AVOID RISK OF FIRE, check all wiring and ensure all circuit breakers are installed in the proper position before energizing panel.

b. Align the hooks and guides (S) of the branch circuit breaker with the panel and press until breaker snaps into place (fig. 12).

### Step 5: Install Door

- a. Remove the main breaker knockout (T) if a main breaker was installed. Do not remove in installations using the main lugs (L).
- b. Twist-outs (V) must be removed for each position that contains a branch circuit breaker.
- **c.** To remove **twist-outs (V)**, first strike with a screwdriver, then twist with pliers until detached *(fig. 13)*.
  - **NOTE:** Fill any unused open spaces in cover using filler plates (see filler plate instructions).
- ${f d.}$  Install door using the cover screws (provided).
- e. Leviton covers contain a feature for adjustment in flush mounting applications. In flush mount applications for covers larger than 42 spaces, dead front interlock tabs MUST BE disengaged to allow for adjustment of dead front position(fig.14a). Turn each adjustment screw (W) until the cover fits tightly against the circuit breakers (fig.14b).
- f. Apply circuit directory labels in the appropriate location, depending on cover/door type.

### Step 6: Complete the Installation

**WARNING:** Before providing power to the load center, check all electrical connections and confirm that the wiring is correct.

a. Ensure that the main and all branch circuit breakers are in the OFF position. To energize, first turn ON the main breaker, and then turn ON each individual branch circuit breaker.

# **TERMINATIONS**

Termination Point	Wire Material	Wire Gauge	Strip Length	Torque
Main Breaker	Copper/ Aluminum	#3 AWG - 300 MCM	1.0 in.	250 in-lbs.
Main Lug	Copper/ Aluminum	#6 AWG - 300 MCM	1.0 in.	375 in-lbs.
Neutral Line	Copper/ Aluminum	#6 AWG - 300 MCM	1.5 in.	375 in-lbs.
Ground	Copper/ Aluminum	#4 AWG - 2/0 AWG	0.75 in.	50 inlbs
Load Phase (brass) & Load Neutral (silver)	Copper	(1) #4 AWG - #8 AWG, Stranded	0.4 in.	45 inlbs
		(1) #10 AWG, Solid or Stranded		35 inlbs
		(2) #14 AWG - #10 AWG, Solid		35 inlbs
		(1) #12 AWG - #14 AWG, Solid or Stranded		25 inlbs.
		(2) #14 AWG or (2) #12 AWG, Stranded		25 inlbs.
	Aluminum	(1) #4 AWG - #6AWG, Stranded		45 inlbs
		(1) #8 AWG, Stranded		35 inlbs
		(2) #12 AWG - #10 AWG, Solid		35 inlbs
		(1) #10 AWG - #12 AWG, Solid		25 inlbs.
		(2) #12 AWG or (2) #10 AWG, Solid		25 inlbs.
Neutral & Equipment Ground Bar	Copper/ Aluminum	(1) #6 AWG - #4 AWG, Stranded	0.5 in.	35 inlbs
		(1) #8 AWG, Stranded		25 inlbs
		(1) #14 AWG - #10 AWG Solid or Stranded		20 inlbs
	Copper	(2) #14 AWG - #10 AWG, Solid or Stranded		25 inlbs
		(1) #14 AWG and (1) #12 AWG, Solid		25 inlbs
		(1) #14 AWG and (1) #10 AWG, Solid or Stranded		25 inlbs
		(1) #12 AWG and (1) #10 AWG, Solid		25 inlbs
	Aluminum	(2) #12 AWG - #10 AWG, Solid		20 inlbs
		(1) #12 AWG and (1) #10 AWG, Solid		20 inlbs
Neutral Bar	Copper/ Aluminum	#4 AWG - #1 AWG, Stranded	0.5 in.	50 inlbs
		#8 AWG - #6 AWG, Stranded		30 inlbs
	Copper	#14 AWG - #10 AWG, Solid or Stranded		30 inlbs
	Aluminum	#12 AWG - #10 AWG, Solid		30 inlbs

