Control Power Panels with Breakers

Control power panels with breakers are available in two different sizes, each of which may be either surface-mounted or recess-mounted, in an electrical closet or other equipment room. The number of remote power panels—and the types of components within them—may be specified to fit the size, lighting plan, and design of a home.

Control power panels may be distributed throughout the home for added flexibility during installation of the line-voltage wiring.

Control power panels with breakers may contain remote power modules (RPMs) and a control power module interface. Panels with breakers may not contain processors.

Control power panels with breakers require only one feed from the main distribution panel, reducing the number of wiring connections required (feed-through panels require up to nine separate feeds).

The HWBP-2S, HWAP-8D, HWBP-8D and PBK8 include factory-installed wiring from standard breakers to the terminal blocks. HWAP-8D power panels include commercial-grade combination Arc-Fault Circuit Interruptor (AFCI) breakers in place of the standard breakers.
Control Power Panels with Breakers

Model Numbers

<table>
<thead>
<tr>
<th>Single Phase 3-Wire</th>
<th>120/240 V~ 50/60 Hz</th>
<th>175 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWBP-2S-15-120L3</td>
<td>15 A</td>
<td>HWAP-8D-20-120L3 20 A</td>
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<tr>
<td>HWAP-8D-15-120L3</td>
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<td>HWBP-8D-20-120L3 20 A</td>
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<tr>
<td>HWBP-8D-15-120L3</td>
<td>15 A</td>
<td>PBK8-40-13-CE 20 A</td>
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<tr>
<td>HWBP-2S-20-120L3</td>
<td>20 A</td>
<td>PBK8-40-13-10-CE 20 A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Three Phase 4-Wire</th>
<th>120/208 V~ 50/60 Hz</th>
<th>175 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWBP-2S-15-120L4</td>
<td>15 A</td>
<td>HWBP-2S-20-120L4 20 A</td>
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<td>HWAP-8D-15-120L4</td>
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<tr>
<td>HWBP-8D-15-120L4</td>
<td>15 A</td>
<td>HWBP-8D-20-120L4 20 A</td>
</tr>
</tbody>
</table>

Specifications

|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power         | **Single phase 3-wire:** 120 V~/240 V~ 50/60 Hz 175 A  
**Three phase 4-wire:** 120 V~/208 V~ 50/60 Hz 175 A |
| Regulatory Approvals | HW Models: UL, CSA, NOM  
PBK8 Models: CE, C-tick |
| Environment   | Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0 to 90% humidity, non-condensing. Indoor use only. |
| Cooling       | Passive cooling. |
| Line-Voltage Connections | Use copper wire only, supply conductors 140 °F to 167 °F (60 °C to 75 °C). DIN rail-mounted terminal blocks provided for line-voltage remote power module and Module Interface power wiring. |
| DIN Rail Terminal Blocks | Terminal blocks will accept one 18 AWG to 10 AWG (1.0 mm² to 6.0 mm²) wire or two 18 AWG to 16 AWG (1.0 mm² to 1.5 mm²) wires. Terminal blocks should be tightened to 3.5 in-lb to 5.0 in-lb (0.40 N•m to 0.57 N•m). |
| Ground Bar Terminals | HW Models: 24 ground termination points.  
PBK8 Models: 40 ground termination points. |
| Miswire Protection | All terminal blocks are shipped with bypass jumpers installed. After verifying that each circuit is wired correctly, remove the bypass jumpers for system operation. |
| Arc Fault Circuit Interrupter (AFCI) Breakers | HWAP-8D panels are equipped with commercial-grade combination (AFCI) breakers for protection against series arcs, parallel arcs, and line-to-ground arcs. Refer to FAQ #235 “Using Arc-Fault Breakers with HomeWorks” for detailed information. HWABP-8D panels can be ordered with AFCI breakers or the AFCI breakers can be installed in the field. Contact Lutron Customer Service for ordering details. |
Control Power Panels with Breakers

Dimensions

- **8D Models**: 15¼ in (384 mm) x 59 in (1500 mm) x 4½ in (105 mm)
- **2S Models**: 15¼ in (384 mm) x 24 in (610 mm) x 4½ in (105 mm)
- **PBK8 Models**: 16½ in (427 mm) x 63 in (1600 mm) x 4 in (102 mm)

Mounting

Control power panel may be surface-mounted or recess-mounted. Mount the control panel so that line-voltage wiring will be at least 6 ft (1.8 m) from audio or electronic equipment and wiring.

Mount control power panel with breakers using one of the following methods (mounting hardware is not provided):

a. **Surface Mount** – Use keyholes with bolts sufficient for 100 lb (45 kg) load, 1/4 in (M6) bolts recommended.

b. **Recess Mount** – Use screws sufficient for 100 lb (45 kg) through the corners of the control power panel with breakers. Mount control panel fully into the stud bay, with the back flush against the inner wall surface. HW models are 4½ in (105 mm) deep and PBK8 models are 4 in (102 mm) past cover mounting tabs (including pedestal).

**NOTICE:** This equipment is air-cooled. Mount in a location where the vented cover will not be blocked. 12 in (305 mm) of clearance in front of the vents is required.

**NOTICE:** Power supply will hum slightly and internal relays will click while in use. Mount in a location where such noise is acceptable.

Construction

Control Power Panel with Breakers: 16-gauge galvanized sheet metal (unpainted).

Cover: Painted (black) metal cover with ventilation holes.

Cover is attached using phillips-head screws (included).

Warranty


Dimensions & Mounting

Measurements shown as: in (mm)

-2S Models

Note: The panel is 4 ¼ (105) deep past cover mounting tabs.

-8D Models

Note: The panel is 4 ¼ (105) deep past cover mounting tabs.
Control Power Panels with Breakers

Dimensions & Mounting (Continued)

Measurements shown as: in (mm)

**PBK8 Models**

The panel is 4 (102) deep past cover mounting tabs.

**Notes:**
1. PBK8-40-13-CE has one 3-phase, 4-pole, 40 A main input breaker; eight (8) 13 A branch circuit input breakers; and one (1) 13 A input control breaker.
2. PBK8-40-13-10-CE also has thirty-two (32) 10 A output breakers.
Configurations

-2S Models

Note: Only 4R modules may be used with HWBP-2S

-8D Models

Note: Only 4R modules may be used with HWBP-2S
Control Power Panels with Breakers

Configurations (Continued)

PBK8