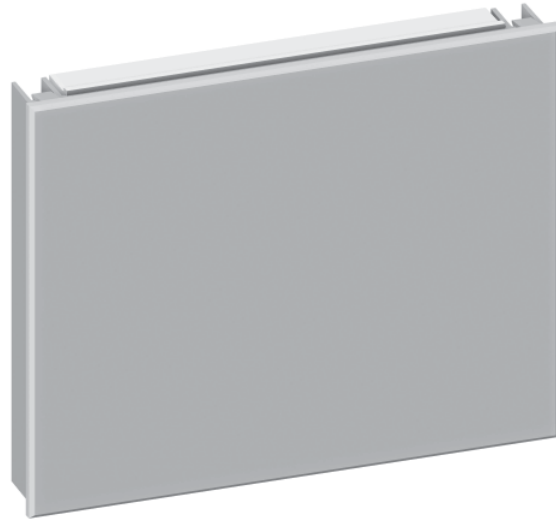


## Switching Power Module

### Description

- Provides capability for a zone on a GRAFIK Eye® control unit (or other product) to switch a fully loaded circuit of lighting.
- May be used to switch incandescent, electronic low-voltage, magnetic low-voltage, HID, fluorescent ballasts, and neon/cold cathode lighting sources.
- Utilizes Softswitch® arcless switching technology.
- Provides power and switching for one zone.
- Up to 3 power modules may be wired on a single GRAFIK Eye® zone.
- Model available for 120 V~ control power.
- Model available for 120 – 277 V~ load power.



### Works with 120 V~ versions of:

- Lutron® 3-wire fluorescent dimmers and RadioRA® 2 dimmers (consult Lutron for Vierti® products); see approved list in the dimmers & switches specification guide at [www.lutron.com](http://www.lutron.com)
- GRAFIK Eye® QS control units
- GRAFIK Eye® 3000 Series control units
- LP, LCP, and GP dimming panels
- HomeWorks® and HomeWorks® QS remote power panels

### Model and Capacities

Control Power	Load Power	Capacity	Model Number
120 V~	120 – 277 V~	16 A	PHPM-SW-DV-WH

<b>Job Name:</b>  <b>Job Number:</b>	<b>Model Numbers:</b>
--------------------------------------------	-----------------------

## Specifications

### Power

- Control voltage: 120 V~
- Load voltage: 120 – 277 V~
- Capacity: Full 16 A  
120 – 277 V~: 1920 – 4432 W
- Frequency: 50 / 60 Hz, phase-to-neutral.
- Load (output) power: Phase independent of control device/control voltage.

### Sources/Load Types

- Switches the following load types:
  - Incandescent (tungsten)
  - Halogen
  - LED
  - CFL
  - Magnetic low-voltage transformer (iron core)
  - Electronic (solid-state) low-voltage transformer
  - Magnetic and electronic fluorescent dimming ballasts
  - Neon/cold-cathode
  - HID
- Motors:
  - 1½ HP at 277 V~
  - 1/2 HP at 120 V~
- May be used with GFI/AFCI breaker protected loads.

### Key Design Features

- Patented Softswitch® technology.
- Two LEDs on front of unit provide diagnostic information (visible when faceplate is removed).

### Terminals

- Accepts up to two 12 AWG (2.5 mm<sup>2</sup>) wires.

### Environment

- 32 to 104 °F (0 to 40 °C). Relative humidity less than 90% non-condensing.
- Indoor use only.
- Maximum heat output of module: 15 BTU/hour.

### Mounting

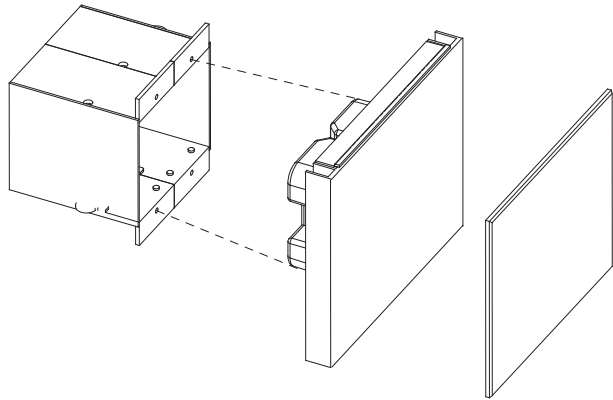
- Surface or recess mount.
- Power module is UL tested and approved for use in spaces designed for environmental air handling.

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	

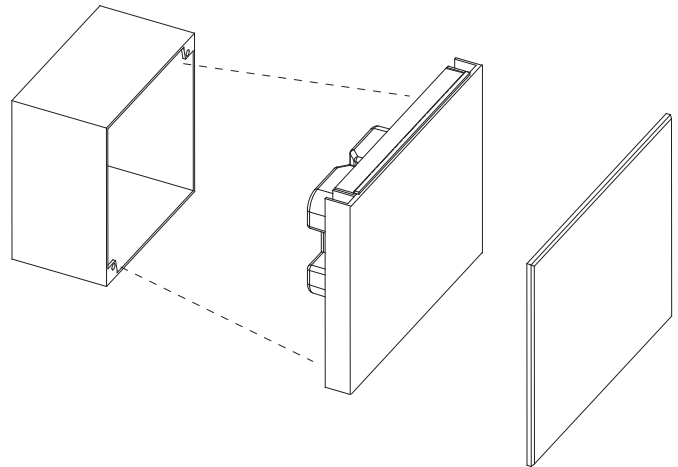
## Dimensions and Mounting

- Mount in a 2-gang U.S. wallbox 3.5 in (89 mm) deep or 4 x 4 in (102 x 102 mm) junction box 2.1 in (53 mm) deep.
- Indoor use only.
- Mount only where ambient temperature is 32 to 104 °F (0 to 40 °C).
- Allow 4.5 in (114 mm) clearance above and below unit and between faceplates when mounting in a vertical layout.
- Mount so line (mains) voltage wiring is at least 6 ft (1.8 m) from sound or electronic equipment and wiring.
- Mount within 7° of true vertical.

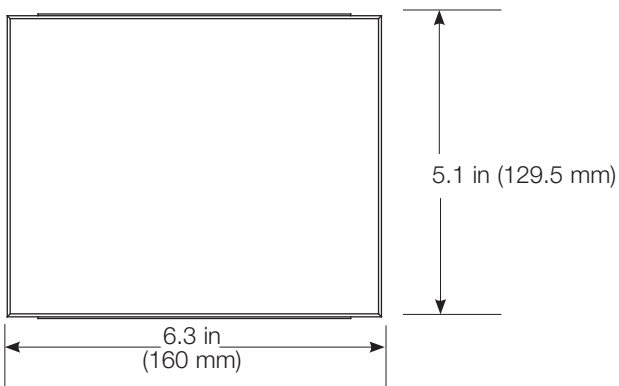
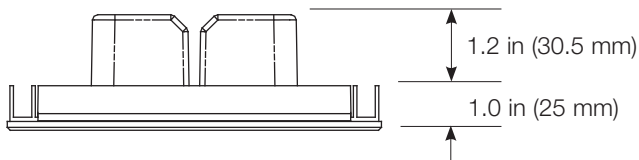
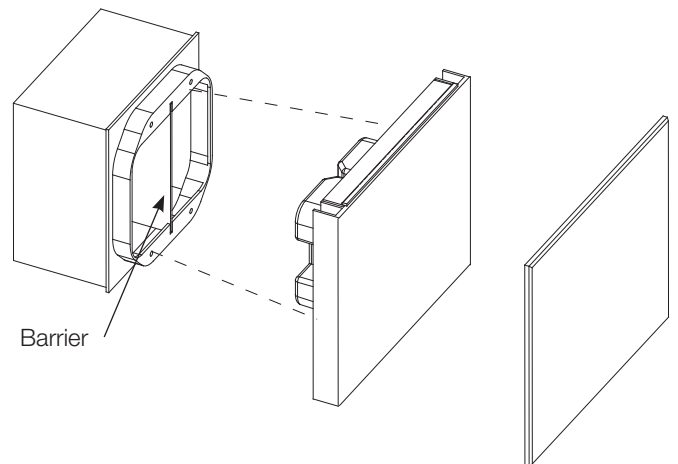
Mount to 2-gang U.S. wallbox



Mount to 4 x 4 in (102 x 102 mm), 2.1 in (53 mm) deep U.S. junction box



Mount to 4 x 4 in (102 x 102 mm), 2.1 in (53 mm) deep U.S. junction box with barrier (for 277 V~ loads if required by local electrical code)



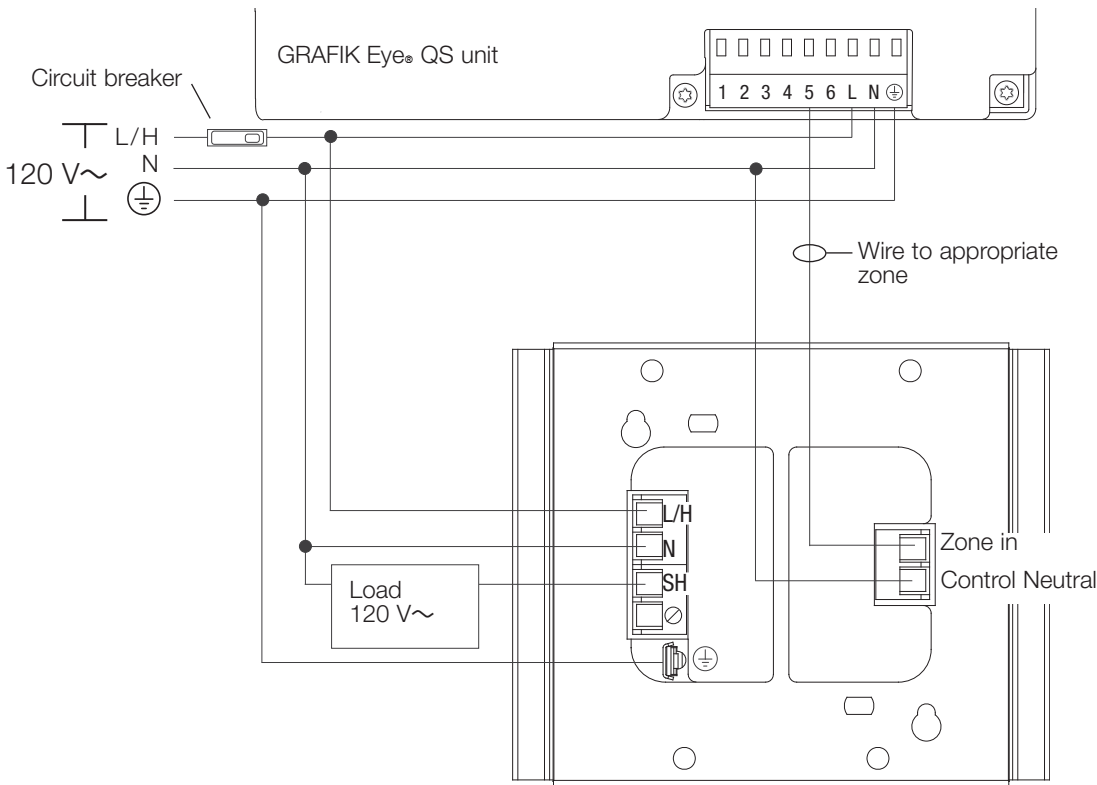
Job Name:	Model Numbers:
Job Number:	

## Wiring

- Pull 12 AWG (2.5 mm<sup>2</sup>) copper wires [167 °F (75 °C)] for input power and load circuit.
- Strip 1/2 in (12 mm) insulation from wires before connecting.
- Run separate neutral for load circuit - no common neutrals.
- May be used with GFI breaker protected loads. Load circuit wiring (from GFI breaker to power module to load) must be run in its own non-metallic conduit, or nuisance tripping may occur. Maximum 100 ft (30.5 m) between power module and load.
- May be used with AFCI breaker protected loads. An AFCI circuit can be loaded to the full allowable NEC® rating for switched lighting. If combining dimmed and switched lighting on the same AFCI circuit, the amount of dimmed lighting should not exceed 1000 W, as this may trip the AFCI breaker.

### Single Power Feed

**Note:** The power modules may be on the same circuit as the control unit only if the total load does not exceed the rating of the breaker.



### Legend

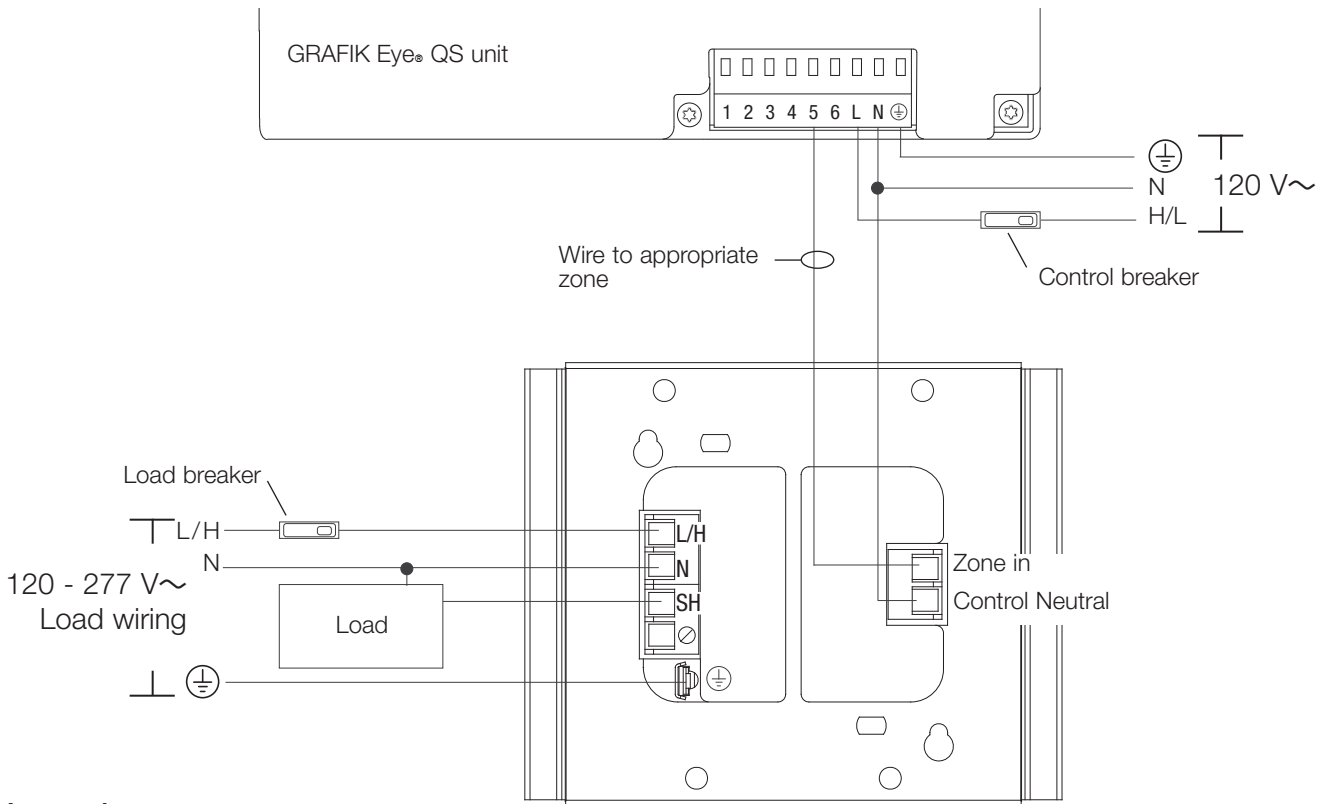
- L/H Line/Hot
- N Neutral
- SH Switched Hot
- DH Dimmed Hot
- ⊕ Ground
- ⊘ Not Used

Job Name:	Model Numbers:
Job Number:	

# Wiring

## Multiple Power Feeds

The load breaker may be on a different phase than the control breaker.



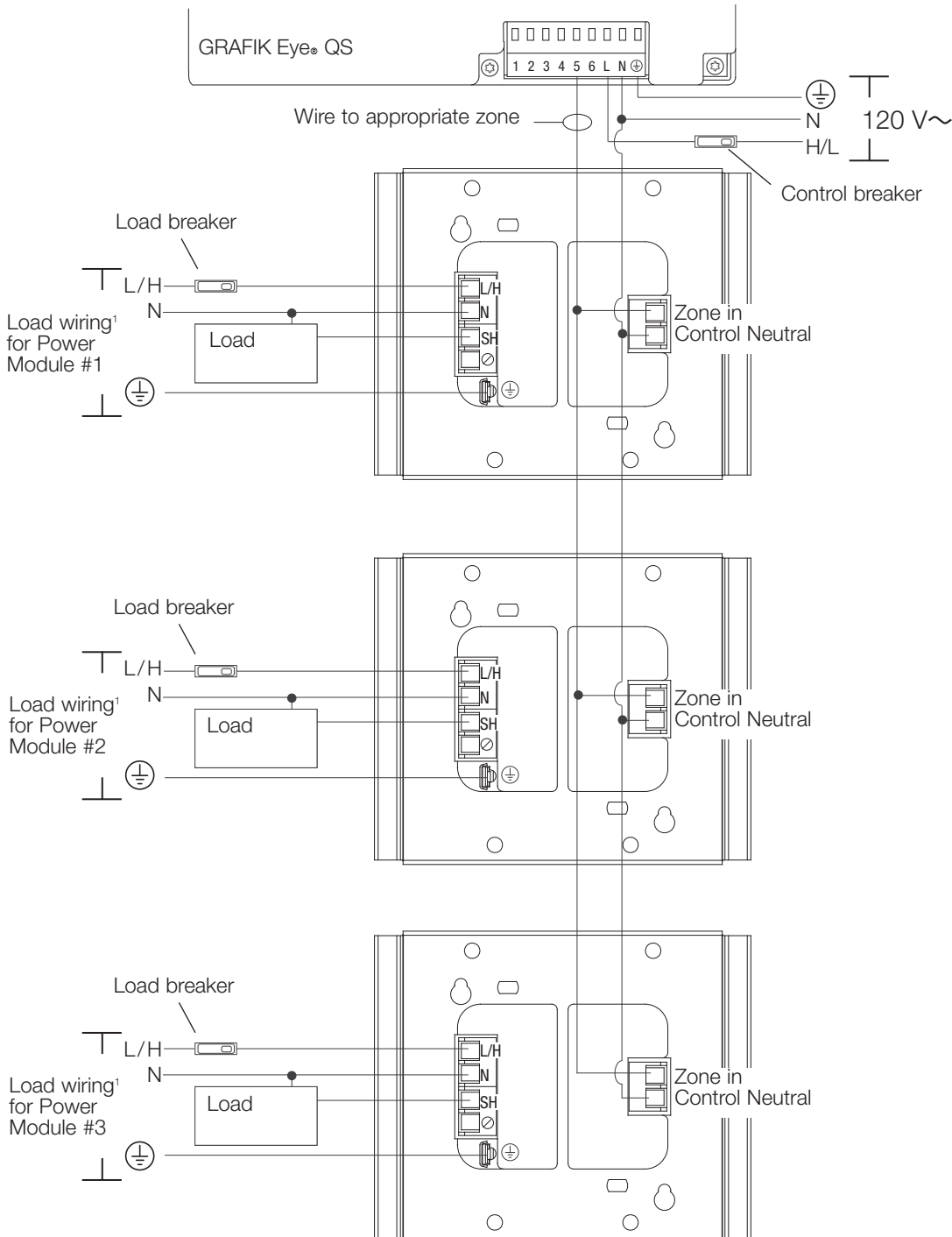
### Legend

- L/H Line/Hot
- N Neutral
- SH Switched Hot
- DH Dimmed Hot
- ⊕ Ground
- ⊘ Not Used

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	

## Wiring Multiple Power Modules to a Single GRAFIK Eye® Zone

Shown with separate feeds for control and loads. All breakers must be turned off prior to installing or servicing the modules. Up to 3 power modules may be wired to a single zone.

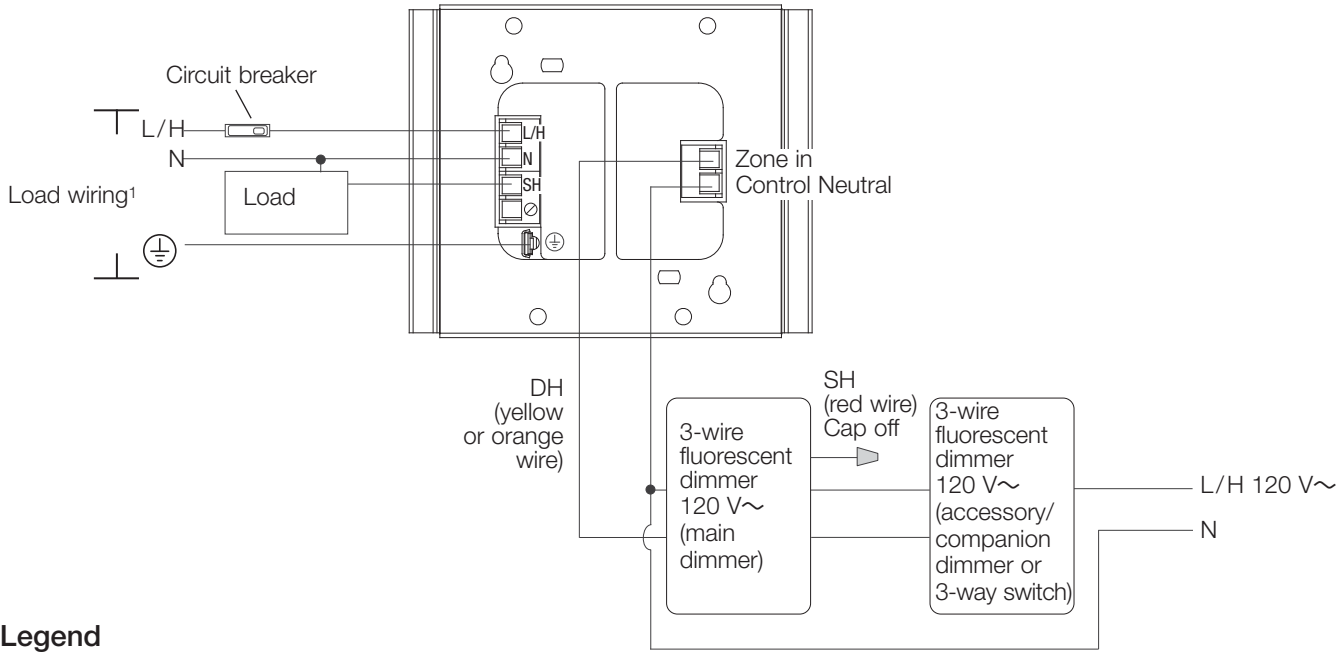


<sup>1</sup>Load feed: 120 - 277 V~ for PHPM-SW-DV-WH

Job Name:	Model Numbers:
Job Number:	

### Multi-location Wiring

**Note:** The power module may be on the same circuit/control zone as the control device only if the total load does not exceed the rating of the breaker (120 V~ only).



**Legend**

- L/H Line/Hot
- N Neutral
- SH Switched Hot
- DH Dimmed Hot
- ⊕ Ground
- ⊘ Not Used

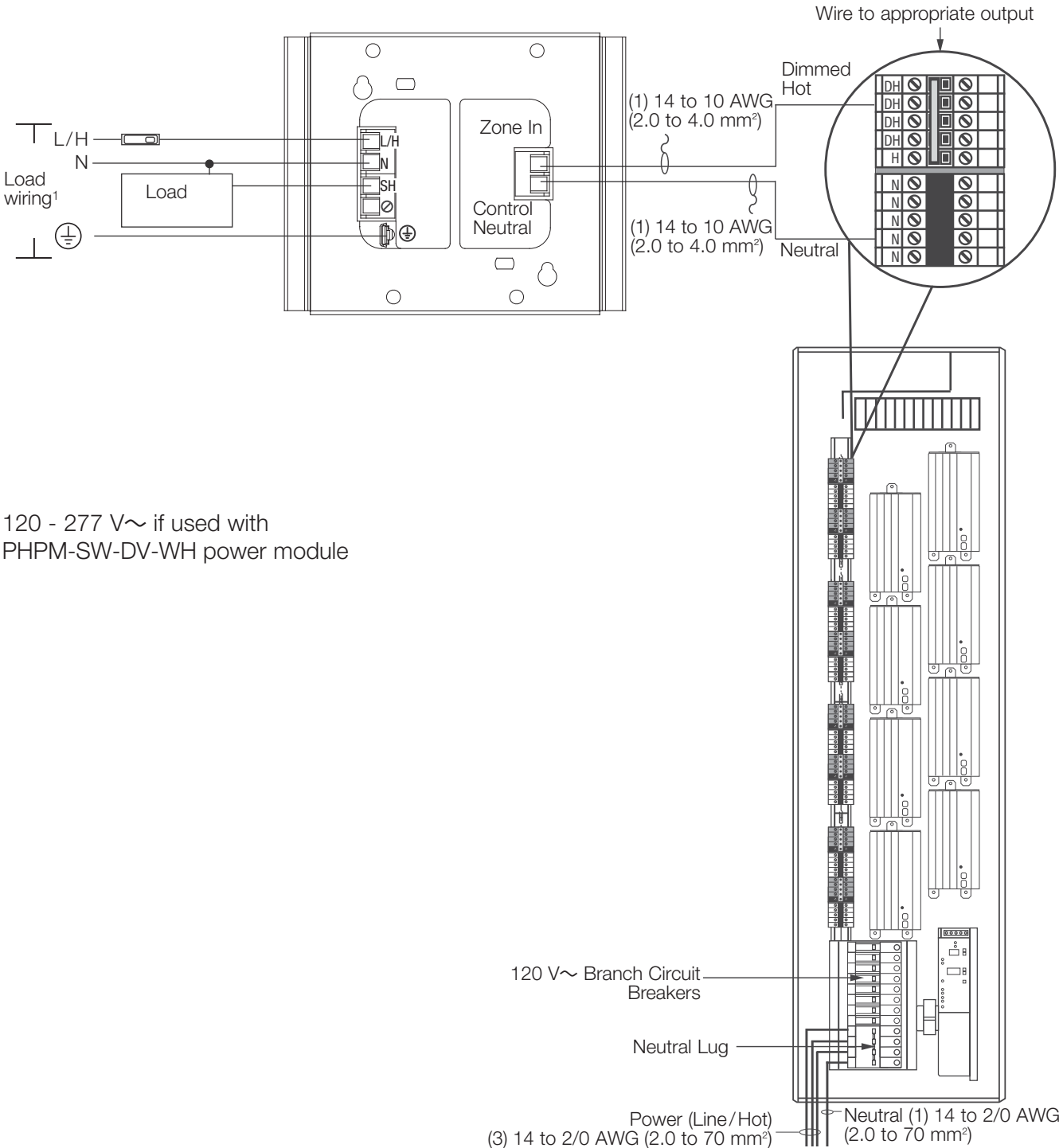
For specific wire colors, see the wallbox lighting controls catalog at [www.lutron.com/wallbox](http://www.lutron.com/wallbox) catalog

<sup>1</sup>Load feed: 120 - 277 V~ for PHPM-SW-DV-WH

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	

## Wiring a Power Module to an LP, LCP, GP, or HomeWorks® Panel

Up to three switching power modules may be wired to an output of a 120 V~ LP or LCP panel. The load type for the output must be set as non-dim load type on the panel's circuit selector (for an LP or GP panel), controller (for an LCP panel), or HomeWorks® software (for a HomeWorks® panel).



<sup>1</sup>120 - 277 V~ if used with PHPM-SW-DV-WH power module

Job Name:	Model Numbers:
Job Number:	