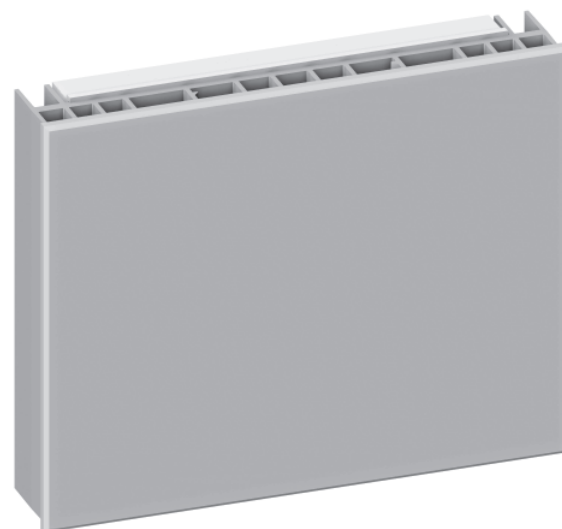


Phase-Adaptive Power Module with 3-Wire Fluorescent Input

Description

- When connected to a 20 A circuit breaker, provides capacity on a 3-wire fluorescent dimmer for a full 16 A load of lighting.
- May be used to dim incandescent, halogen, electronic low-voltage (ELV), magnetic low-voltage (MLV), neon/cold cathode, or Lutron Tu-Wire lighting sources.
- Phase-adaptive technology automatically selects leading-edge or trailing-edge dimming for low-voltage transformers.
- Up to 3 power modules may be controlled by a single dimmer.
- **Models require 120 V~ control voltage.**
- Models available for 120 V~ only or 120 – 277 V~ load voltage.
- Not for use with non-dim loads.



Works with 120 V~ versions of:

- Lutron 3-wire fluorescent dimmers (consult Lutron for Verti); see approved list in the dimmers & switches specification guide at www.lutron.com
- GRAFIK Eye QS control units¹
- GRAFIK Eye 3000 Series control units**
- LP, LCP, and GP dimming panels²
- HomeWorks and HomeWorks QS remote power panels²
- HomeWorks and HomeWorks QS neutral wire dimmers
- RadioRA 2 neutral wire dimmers
- Caseta Wireless neutral wire dimmers
- EcoSystem interface C5-BMJ-xxx

Models and Capacities

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

¹ Set to fluorescent module load type

² Set to 3-wire fluorescent load type

Job Name:	Model Numbers:
Job Number:	

Specifications

Regulatory Approvals

- UL® listed
- CSA certified
- NOM certified
- Complies with requirements for use in other spaces used for environmental air (plenums) per NEC® 2014 300.22(C)(3)

Power

- Control voltage: 120 V~
- Load voltage: 120 V~ only for PHPM-WBX-120-WH
120 – 277 V~ for PHPM-WBX-DV-WH
- Capacity: Full 16 A
120 V~: 1920 W
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

- Operates these sources with a smooth continuous Square Law dimming curve:
 - Incandescent (tungsten)
 - Halogen
 - MLV transformer (iron core)
 - ELV transformer (solid-state) (must be manufacturer approved for reverse-phase control dimming)
 - Neon/Cold cathode
 - Lutron Tu-Wire fluorescent dimming ballasts
- Incandescent and ELV sources may be controlled on the same circuit/control zone. Up to 30% of the unit's capacity may be used for incandescent lighting.
- Incandescent and MLV sources may be controlled on the same circuit/control zone. Up to 30% of the unit's capacity may be used for incandescent lighting.
- ELV and MLV sources may NOT be controlled on the same circuit/control zone.
- PHPM-WBX not for use with non-dim loads. Use switching power module (PHPM-SW-DV-WH) for non-dim loads.
- Minimum load on power module is 10 W.
- Output must be directly connected to the load. Load side switching is not recommended.

Key Design Features

- Automatically selects between forward phase/leading edge (i.e., MLV) and reverse phase/trailing edge (i.e., ELV) dimming/output based on connected load.
- Patented RTISS Equipped circuitry compensates in real time for incoming line voltage variations: Compensates for +/-2% change in RMS voltage/cycle and +/-2% Hz change in frequency/second.
- Provides air-gap off.
- Module protects itself during most temporary over-current and over-voltage conditions.
- Two LEDs on front of unit provide diagnostic information (visible when faceplate is removed).

Terminals

- Each terminal accepts up to two 12 AWG (2.5 mm²) wires.

Environment

- 32 °F to 104 °F (0 °C to 40 °C). Relative humidity less than 90% non-condensing.
- Indoor use only.
- Maximum heat output of module: 135 BTU.

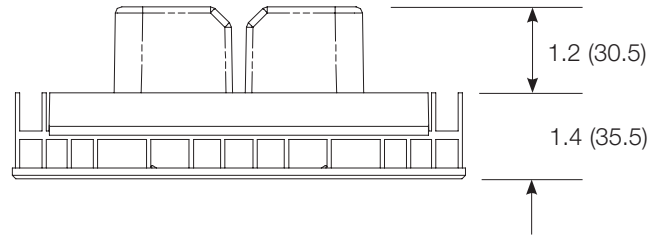
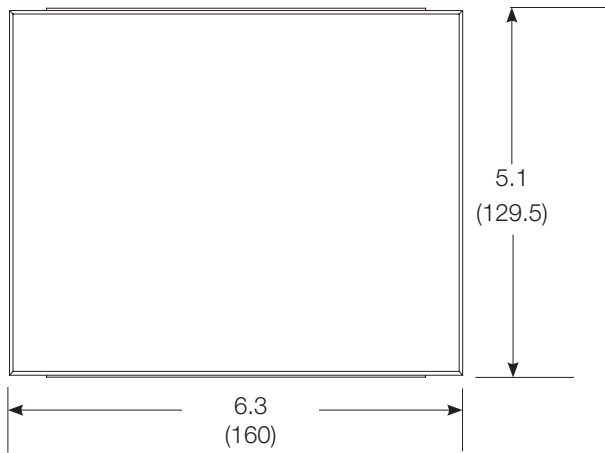
Mounting

- Surface- or recess-mount.

Job Name:	Model Numbers:
Job Number:	

Dimensions

All dimensions shown as: in (mm)



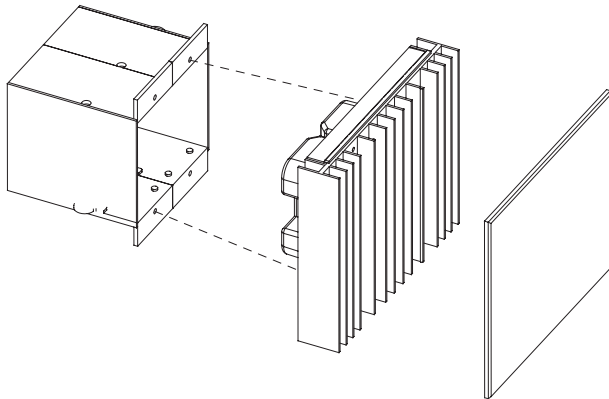
Job Name:	Model Numbers:
Job Number:	

Mounting

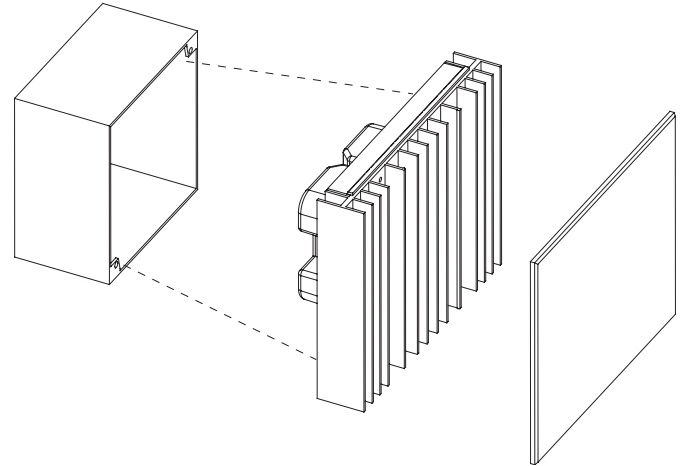
- Mount in 2-gang U.S. wallbox 3.5 in (89 mm) deep or 4 in x 4 in (102 mm x 102 mm) junction box 2.1 in (53 mm) deep.
- Indoor use only.
- This device generates heat; mount only where ambient temperature is 32 °F to 104 °F (0 °C to 40 °C).
- Mount with arrows facing up to ensure adequate cooling.

- Allow 4.5 in (114 mm) above and below unit and between faceplates when mounting several 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.

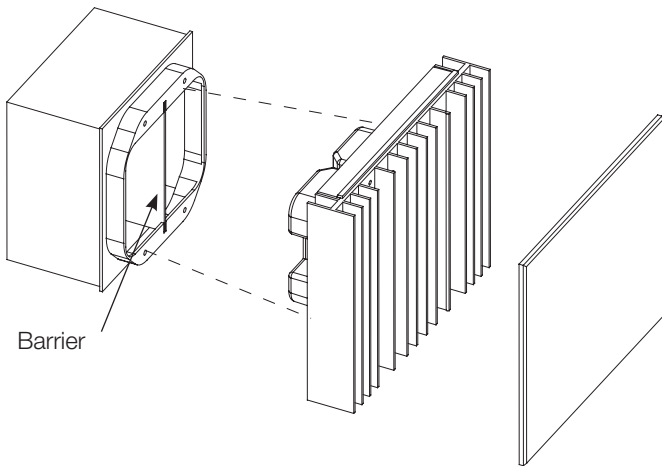
Mount to 2-gang U.S. wallbox



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



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



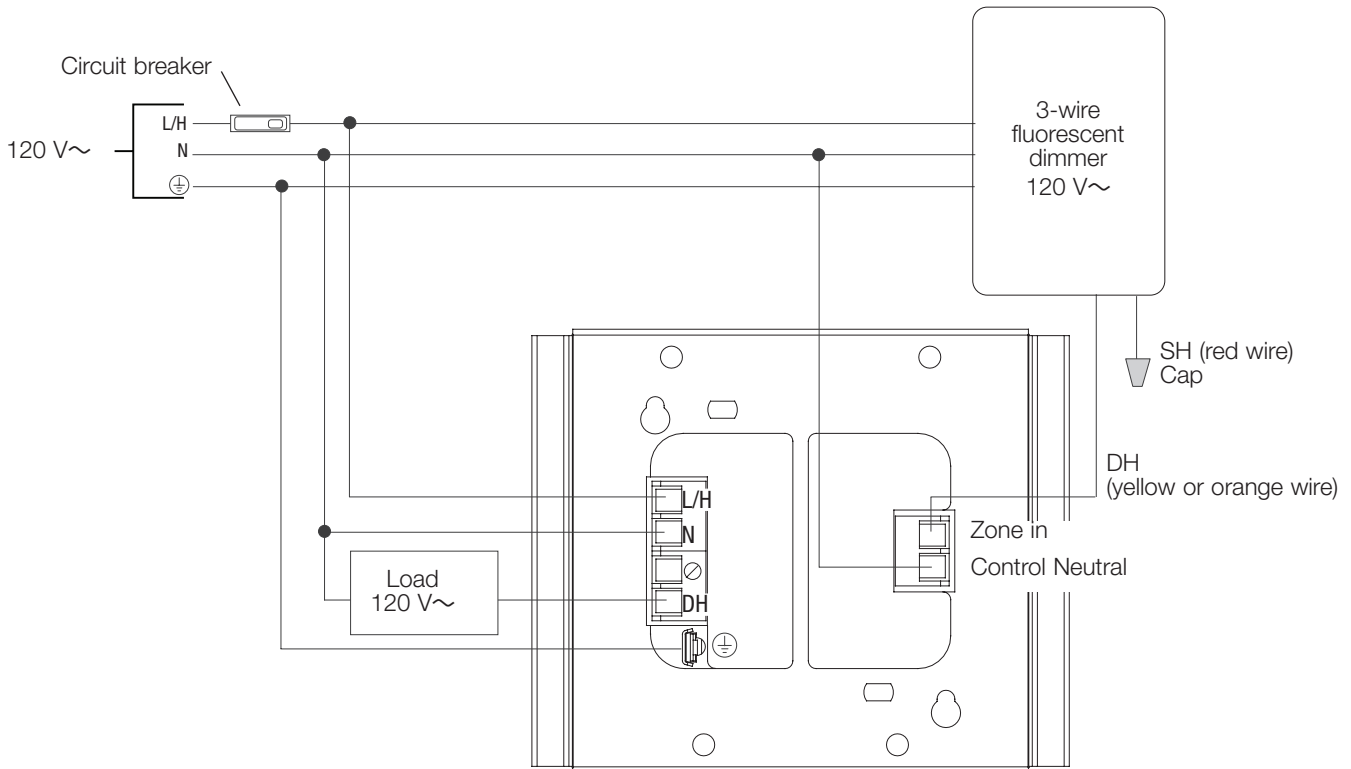
<p>Job Name:</p> <p>Job Number:</p>	<p>Model Numbers:</p>
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Wiring

- Pull 12 AWG (2.5 mm²) copper (Cu) wires [167 °F (75 °C) minimum] 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 AFI breaker protected loads. Maximum load on AFI circuit is 1000 W. Exceeding 1000 W may cause nuisance tripping of AFI breaker.

Single Power Feed

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



Legend

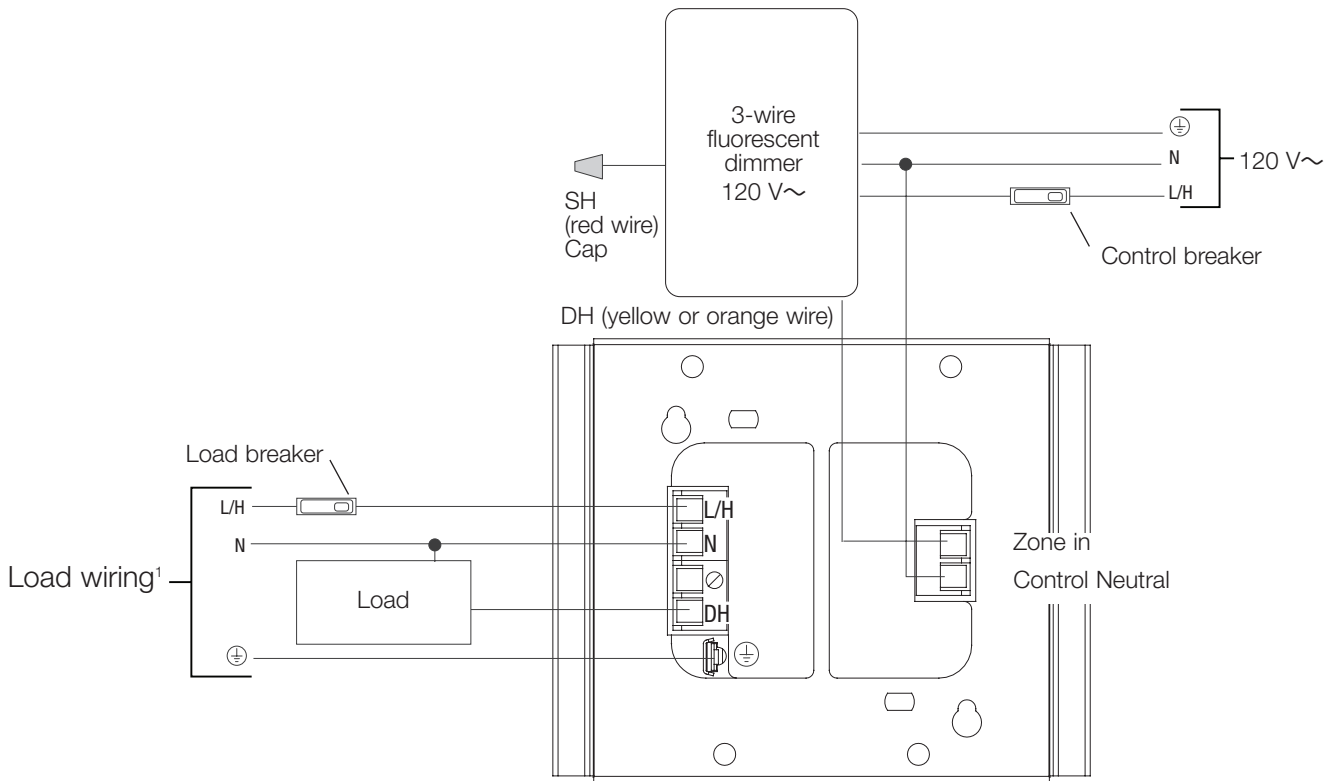
- L/H Line/Hot
- N Neutral
- SH Switched Hot
- DH Dimmed Hot
- ⊕ Ground
- ⊘ Not Used

Job Name:	Model Numbers:
Job Number:	

Wiring (continued)

Separate Power Feeds for Control and Load Sides

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

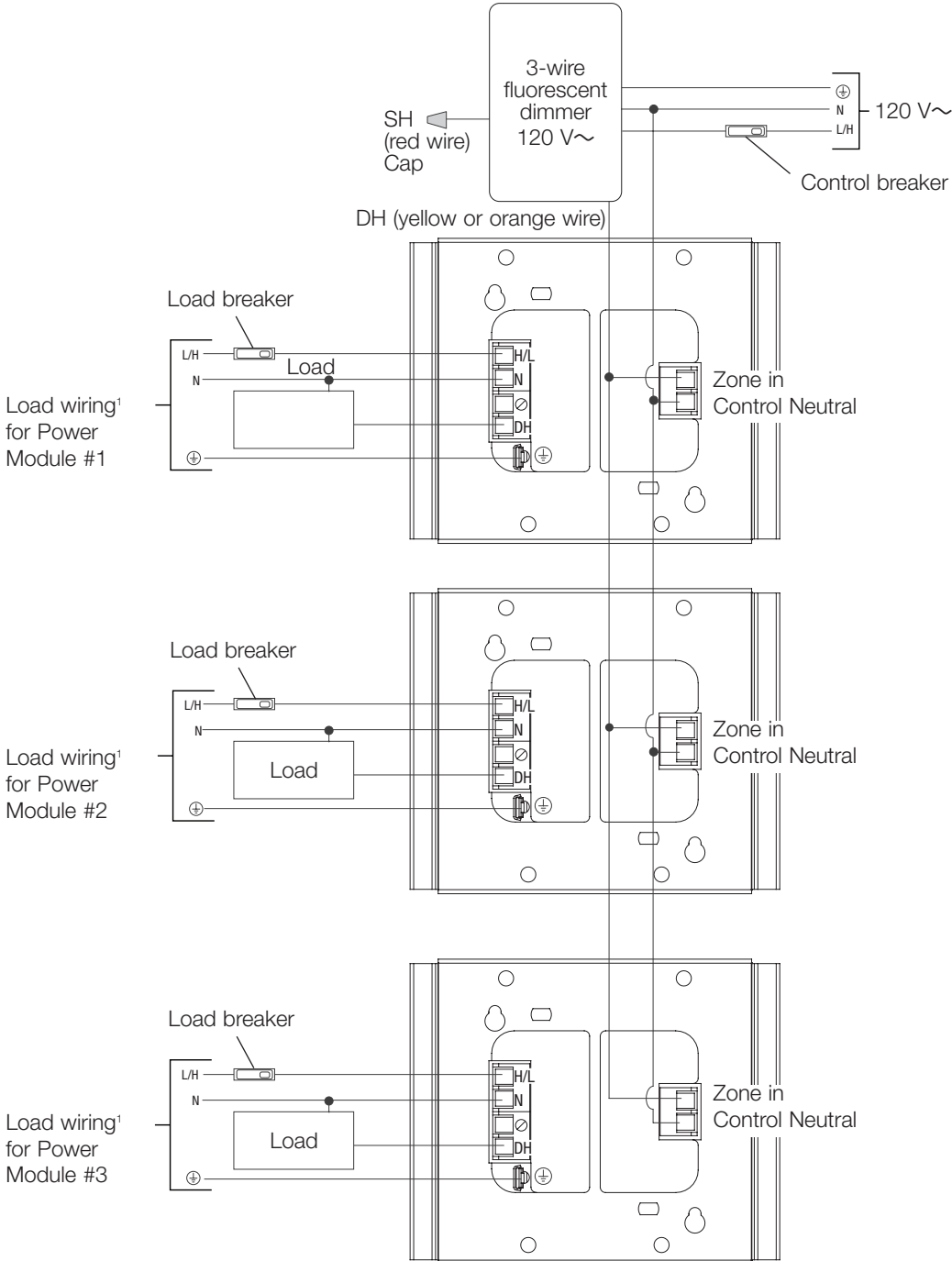
¹ Load feed: 120 V~ for PHPM-WBX-120-WH; 120 – 277 V~ for PHPM-WBX-DV-WH

Job Name:	Model Numbers:
Job Number:	

Wiring (continued)

Wiring Multiple Power Modules to a Single Control Device

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 dimmer.



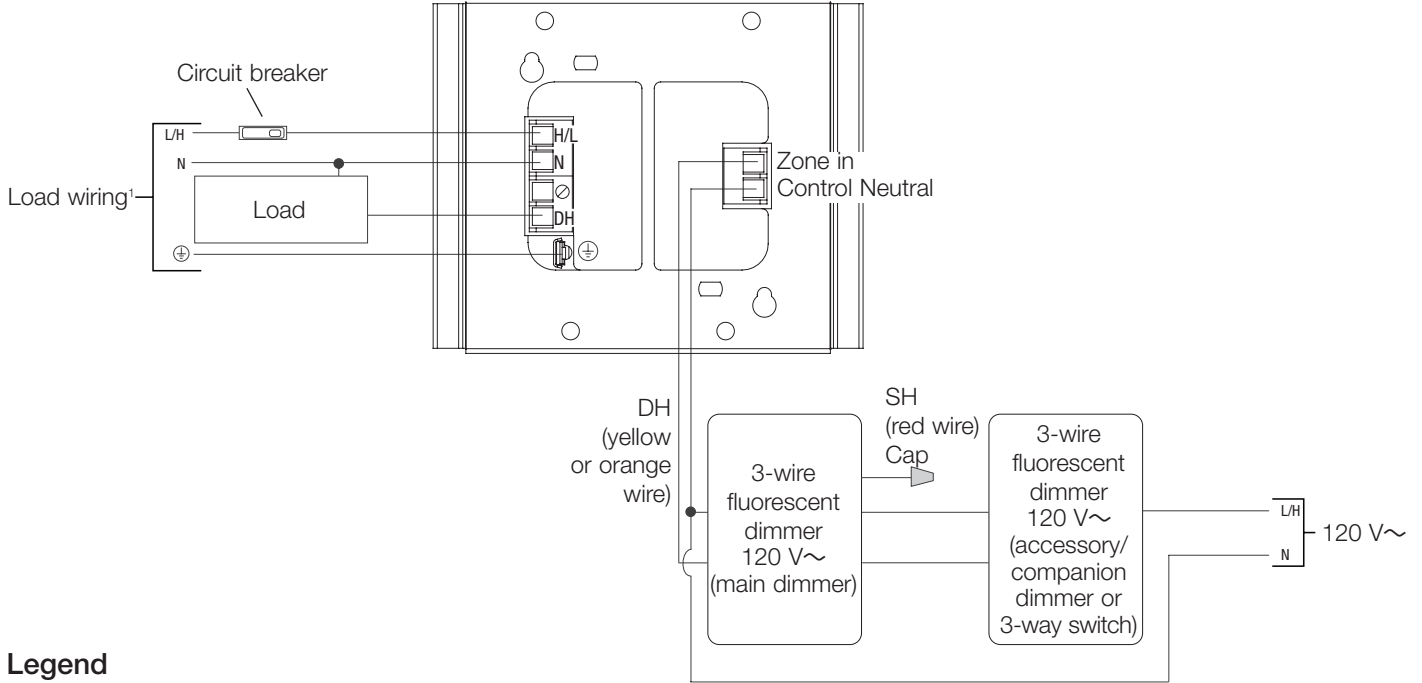
¹ Load feed: 120 V~ for PPHM-WBX-120-WH; 120 – 277 V~ for PPHM-WBX-DV-WH

Job Name:	Model Numbers:
Job Number:	

Wiring (continued)

Multi-location Wiring

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 catalog

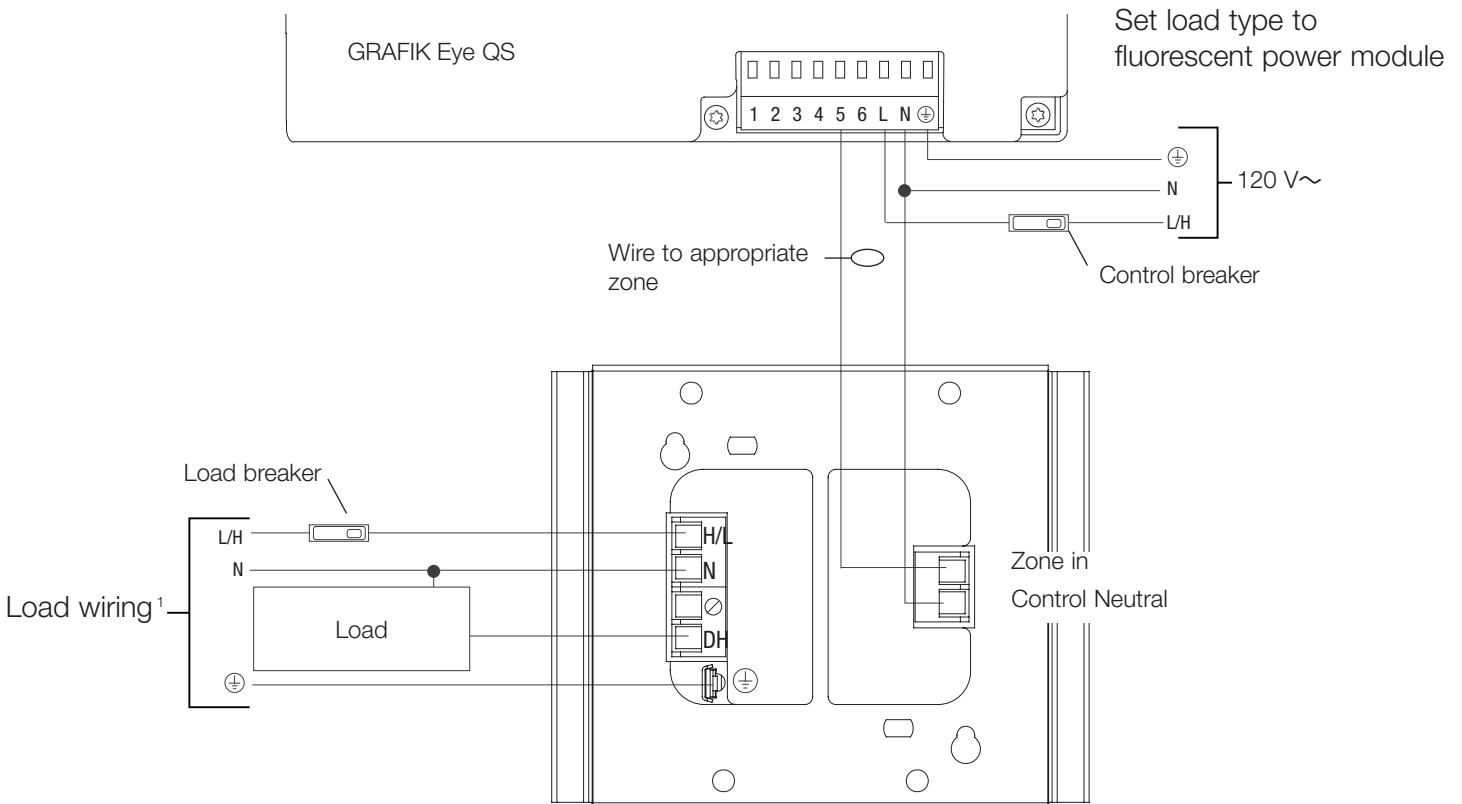
¹ Load feed: 120 V~ for PPHM-WBX-120-WH; 120 – 277 V~ for PPHM-WBX-DV-WH

Job Name:	Model Numbers:
Job Number:	

Wiring (continued)

Wiring to a GRAFIK Eye QS Control Unit - Separate Power Feeds for Control and Load Sides

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

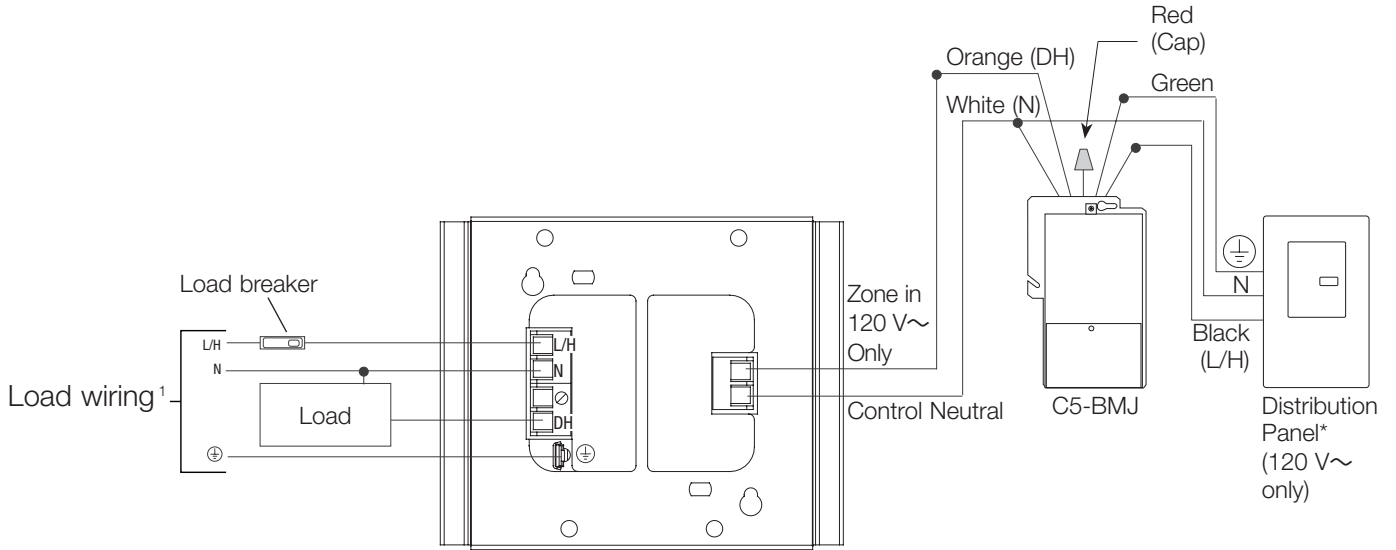
¹ Load feed: 120 V~ for PHPM-WBX-120-WH; 120 – 277 V~ for PHPM-WBX-DV-WH

Job Name:	Model Numbers:
Job Number:	

Wiring (continued)

Wiring to an EcoSystem C5-BMJ Interface - Separate Power Feeds for Control and Load Sides
Control side must be 120 V~

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



***Note:** C5-BMJ must be powered from a 120 V~ distribution panel to ensure proper voltage to the “Zone In” terminal of the PHPM-WBX interface.

Legend

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

¹ Load feed: 120 V~ for PHPM-WBX-120-WH; 120 – 277 V~ for PHPM-WBX-DV-WH

Job Name:	Model Numbers:
Job Number:	

