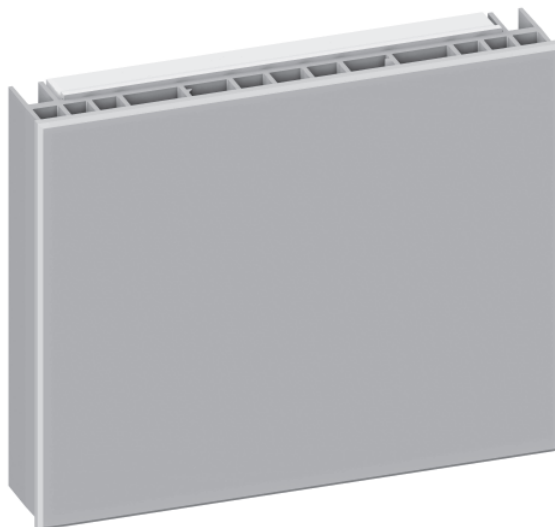


## PHPM-PA-CE-WH

- Provides dimming control for 1 zone of up to 2400 W of lighting load.
- May be used to dim incandescent, halogen, electronic low-voltage, magnetic low-voltage, neon/cold cathode, and LED.
- Auto-detect mode will detect and configure leading-edge or trailing-edge dimming for incandescent / halogen, electronic / magnetic low-voltage and neon / cold cathode light sources.
- Up to 3 power modules may be controlled by a single dimmer.
- Control voltage of 220–240 V~.
- Load voltage of 220–240 V~.
- Not for use with non-dim loads.

### Works with 220–240 V~ versions of:

- GRAFIK Eye QS control units\*
- GRAFIK Eye 3000 Series control units\*\*
- LP, LCP, and GP dimming panels\*\*
- HomeWorks remote power panels\*\*
- HomeWorks in-line dimmer\*\*
- RA2 Select in-line dimmer\*\*
- HomeWorks DIN rail power modules\*\*
- Energi Savr Node phase adaptive\*\*



### Load Type

| Load Type                                                                                                | Wattage                  |
|----------------------------------------------------------------------------------------------------------|--------------------------|
| Incandescent/Halogen  | 2400 W                   |
| ELV (Trailing Edge)   | 2400 W                   |
| MLV (Leading Edge)    | 2400 VA (1 920 W)        |
| Neon/Cold Cathode     | 2400 VA (1 920 W)        |
| LED (Trailing Edge)   | 400 W <sup>1, 2, 3</sup> |

<sup>1</sup> Refer to [www.lutron.com/LEDtool](http://www.lutron.com/LEDtool) for compatibility testing results. Using LED fixtures that are not tested can result in the fixtures not turning on or poor dimming quality. LED dimming performance can vary from fixture to fixture and cannot be guaranteed. Higher ratings (up to the Incandescent rating) can be achieved for specific LED fixtures based on Lutron testing results.

<sup>2</sup> Based on driver input current rating.

<sup>3</sup> Contact Lutron Customer Assistance if your application requires a leading-edge dimmer.

\* Set load type to "power module".

\*\* Set load type to "incandescent".

|             |                |
|-------------|----------------|
| Job Name:   | Model Numbers: |
| Job Number: |                |

## Specifications

### Power

- Capacity: 220–240 V~ 2400 W
- Frequency: 50/60 Hz
- Minimum load on power module is 10 W
- 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
  - Magnetic low-voltage transformer (iron core)
  - Electronic (solid-state) low-voltage transformer (must be manufacturer-approved for trailing-edge control dimming)
  - Neon/Cold cathode
  - LED (trailing-edge)
- Incandescent and low-voltage sources may be controlled on the same circuit/control zone. Incandescent and low-voltage sources may dim at different rates.
- Electronic low-voltage and magnetic low-voltage sources may NOT be controlled on the same circuit/control zone.
- Not for use with non-dim loads.
- Output must be directly connected to a permanently installed load. Load side switching is not permitted.
- Proper short-circuit and overload protection must be provided at the distribution panel. You can use up to a 13 A fuse/circuit breaker for your installation.

### Key Design Features

- The unit starts in trailing-edge and if an incompatible load is detected, it will convert to leading-edge.
- 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 2.5 mm<sup>2</sup> (12 AWG) wires

### Environment

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

### Mounting

- Surface- or recess-mount

### Regulatory Approvals

- CE
- RoHS Compliant
- Rated for 150 W of LEDi per IEC 60669

Job Name:

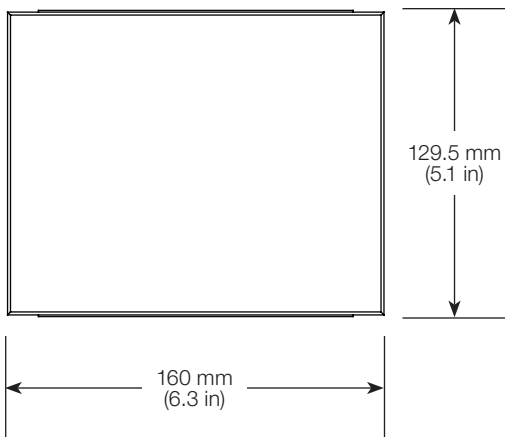
Model Numbers:

Job Number:

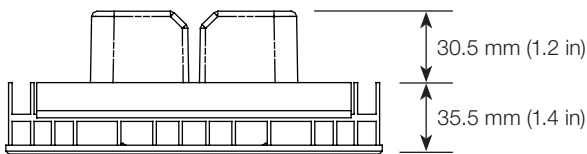
## Dimensions and Mounting

- Mount in 2-gang U.S. wallbox, 89 mm (3.5 in) deep or 102 × 102 mm (4 × 4 in) junction box, 53 mm (2.1 in) deep.
- For indoor use only.
- This device generates heat; mount only where ambient temperature is 0 to 40 °C (32 to 104 °F).
- Mount with arrows facing up to ensure adequate cooling.
- Allow 114 mm (4.5 in) above and below faceplates when mounting several modules in a vertical layout.
- Units may butt together when mounted in a horizontal layout.
- Mount so line (mains) voltage wiring is at least 1.8 m (6 ft) from sound or electronic equipment and wiring.
- Mount within 7° of true vertical.

Front View

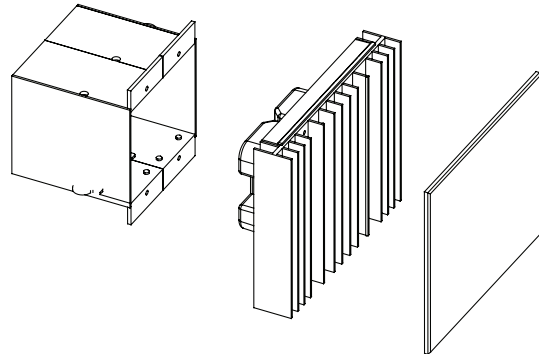


Side View

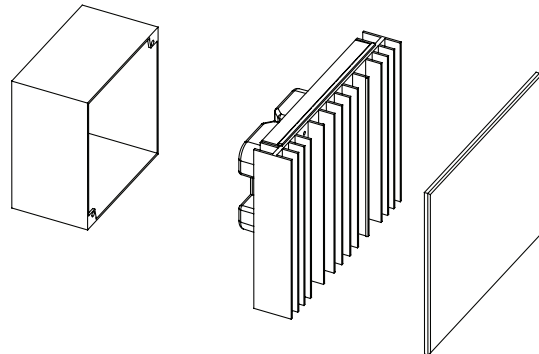


## Mounting Methods

Mount to 2-gang U.S. wallbox  
(Two single-gang wallboxes [P/N 241-519])



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



Job Name:

Model Numbers:

Job Number:

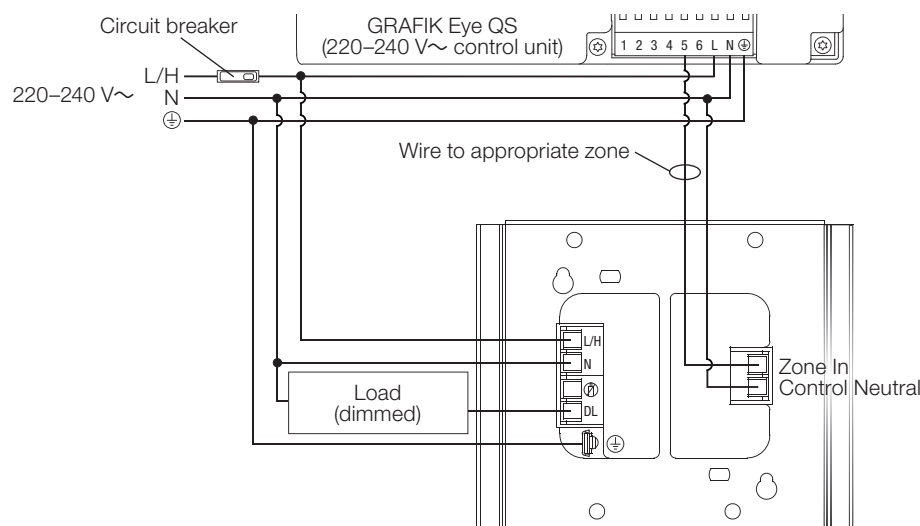
## Wiring

- 2.5 mm<sup>2</sup> (12 AWG) copper (Cu) wires (75 °C/167 °F minimum) for input power and load circuit.
- Strip 12 mm (1/2 in) insulation from wires before connecting.
- Run separate neutral for load circuit; no common neutrals.
- May be used with RCBO protected loads. Load circuit wiring (from RCBO to power module to load) must be run in its own non-metallic conduit, or nuisance tripping may occur. Maximum 30.5 m (100 ft) between power module and load.

## Wiring to a Dimmer

### Single Power Module to Single Control Device: Combined Power Feed for Control and Load Sides

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



#### Legend

- L/H Line/Hot  
 N Neutral  
 DL Dimmed Line  
 ⊕ Earth/Ground  
 ⊘ Not Used

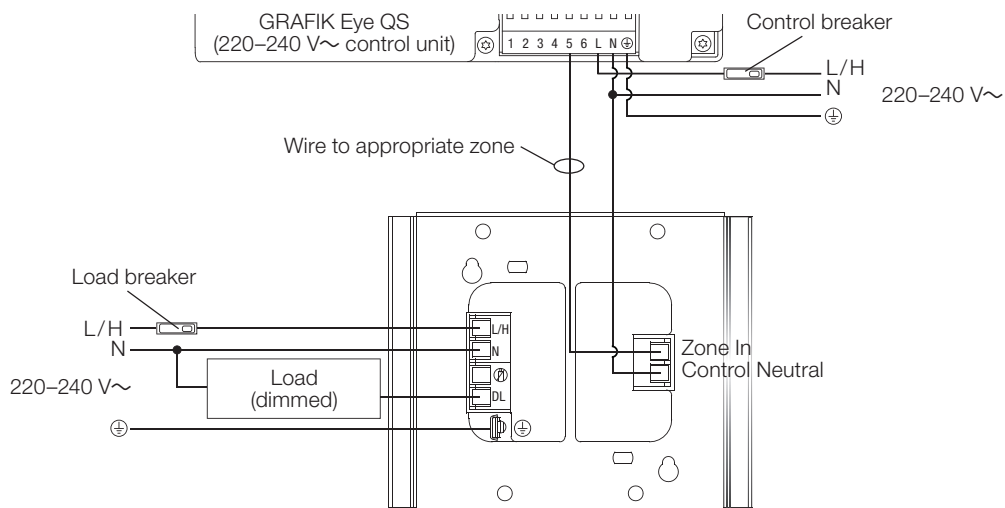
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|             |                |
|-------------|----------------|
| Job Name:   | Model Numbers: |
| Job Number: |                |

## Wiring to a Dimmer (continued)

### Single Power Module to Single Control Device: Separate Power Feeds for Control and Load Sides

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



#### Legend

- L/H Line/Hot  
N Neutral  
DL Dimmed Line  
⊕ Earth/Ground  
⊘ Not Used

(continued on next page...)

Job Name:

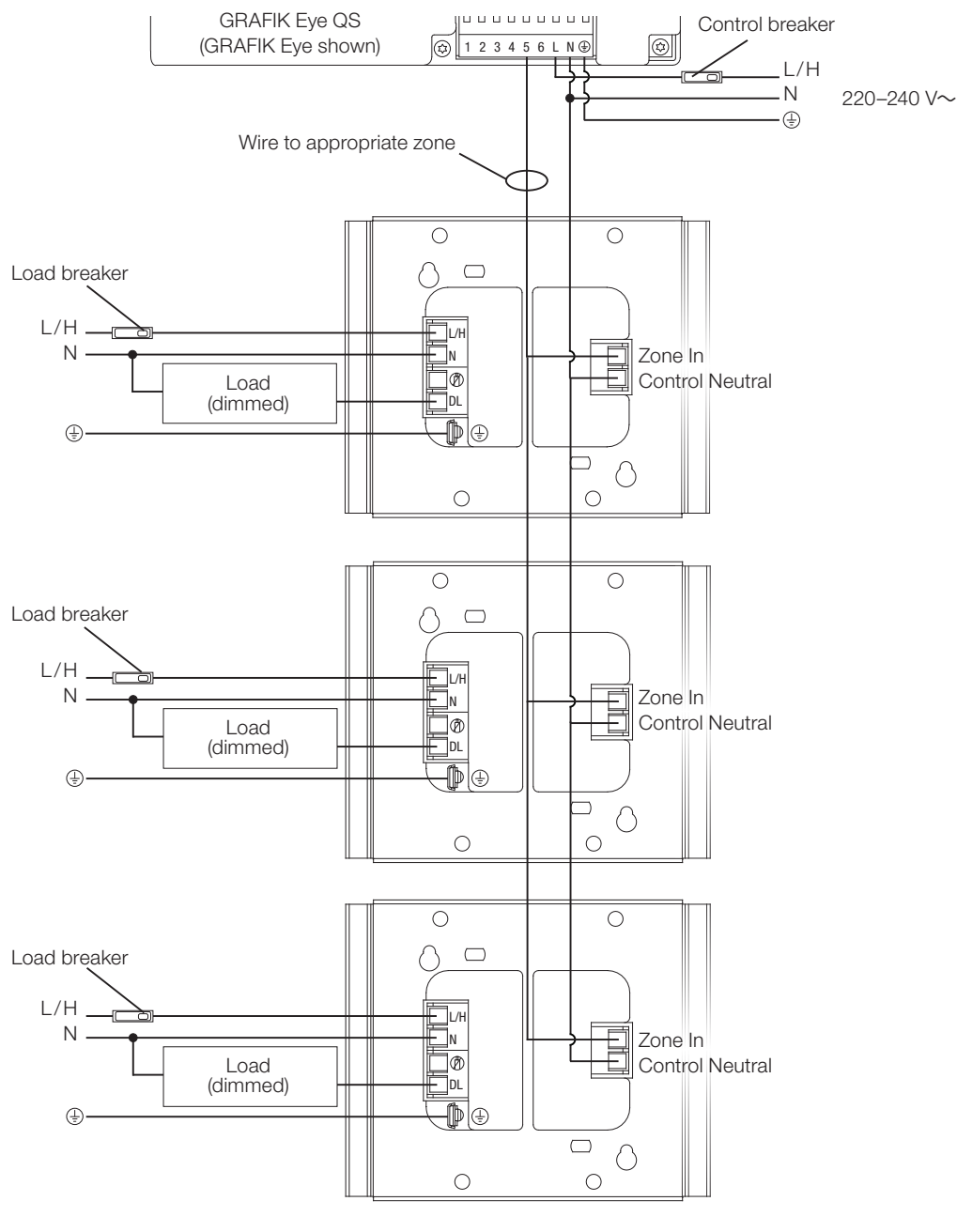
Model Numbers:

Job Number:

## Wiring to a Dimmer (continued)

### Multiple Power Modules to 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.



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Job Name:

Model Numbers:

Job Number: