

OVERVIEW

The rPP PCD power pack is an adaptive phase control dimmer that delivers significant performance and design versatility. It is designed to control large phase dimmed loads, controlling forward-phase-dimming and reverse-phase-dimming loads as large as 16A at 120VAC and 277VAC. Long range wireless communication and the rPP PCD's ability to control full circuits make this device ideal for controlling phase-dimmed loads in both new construction and renovation projects.

FEATURES

- Provides phase dimming control for 2-wire dimming fluorescent, electronic low voltage, incandescent, and magnetic low voltage loads¹
- Controls loads as small as 0A and as high as 16A at 120VAC and 277VAC
- Power monitoring is standard via current measurement with +/- 2% accuracy
- Intelligently selects appropriate dimming method
- Optional built-in, UL 924 compliant emergency options for simpler installation
- Meets NEMA SSL 7A for flicker-free dimming performance²
- Includes a replaceable fuse, which protects the device from overload and short circuit faults

Warranty

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.



rPP PCD Phase Adaptive Dimming Power Pack



ORDERING INFORMATION

| rPP PCD EFP G2 | | | | | | | | | |
|----------------|-----------------------------------|-----------------|--|------------------|---------------------------|----------------------|----------------|------------|----------------------------|
| Series | | Emergency | | Fault Protection | | Territory Compliance | | Generation | |
| rPP PCD | Phase Adaptive Dimming Power Pack | [blank] | None | EFP | External Fault Protection | [blank] | None | G2 | Generation 2 compatibility |
| | | ER | UL 924 Emergency Operation, via power sense leads | | | CP | Chicago Plenum | | |
| | | EM ³ | UL 924 emergency operation, via separate normal power sensing device | | | | | | |

| ACCESSORIES | |
|--------------|------------------|
| NPP FUSE J10 | Replacement Fuse |

Notes:

1. See Output Ratings section for supported loads, load sizes, and dimming types.
2. Meets NEMA SSL 7A when operating in forward-phase mode with Low Trim Level set to 24V. 120VAC applications only.
3. EM devices require an nLight AIR device in the same group to be connected to normal power for wireless normal power detection. See the UL 924 Response section for more information.

SPECIFICATIONS

| | | |
|----------------------|---|---|
| Electrical | Input Ratings | 120-277VAC, 50/60 Hz |
| | Relay Type | Zero-cross, Latching |
| | Class Rating | Class 1 |
| | Current Monitoring | Minimum Current required to ensure +/- 2% Accuracy |
| Mechanical | Dimensions | 4.82"H x 4.72"W x 3.53"D (122mm x 120mm x 90mm) - includes heat sink and 3/8" chase nipple |
| | Weight | 24oz |
| | Mounting | 1/2" Knockout (7/8" hole) |
| | Wires | 12 AWG stranded |
| | Enclosure Color | White (standard), Red (ER & EM) |
| Environmental | Warrantied Operating Temperature | Standard: -20°C to 50°C (-4°F to 122°F) Standard: -20°C to 40°C (-4°F to 104°F) if installed within an enclosure |
| | Relative Humidity | Up to 90%, Non-Condensing |
| General | Standards/ Ratings | System Component to aid in compliance with Title 24, ASHRAE 90.1, IECC |
| | NEMA | NEMA SSL 7A NEMA 410 |
| | cULus | UL 916 (E167435) UL 924 (EM & ER) UL 2043 |
| | CSA | CSA-22.2 No. 141-15 |
| | RoHS | Compliant |
| | Security | Application Data Encryption: AES-128 bit Mutual Entity Authentication Message Confidentiality Message Authentication and Replay Prevention Limited Anonymity Complies with California Civil Code Title 1.81.26, Security of Connected Devices, approved under Senate Bill No. 327 (2018) |
| | Radio Frequency | Dual Radio: 900MHz & 2.4GHz |
| | RF Transmit Power | 900MHz: up to 20dBm 2.4GHz: up to 10.4 dBm |
| | Wireless Standard | 900MHz: IEEE 802.15.4-based 2.4GHz: Version 4.0+ of the Bluetooth specification |
| | Wireless Range | 900MHz: Up to 1,000 ft. (~304m) in free space/ line of sight Minimum of 150 ft through typical construction 2.4GHz: Up to 60 ft. (~18m) in free space/ line of sight |
| | Regulatory Compliance | FCC ID: 2ADCB-RMODIT3 IC: 6715C-RMODIT3 IFETEL: RCPNLNL20-2057 |
| | Programming Tool | CLAIRITY™ + Mobile App |

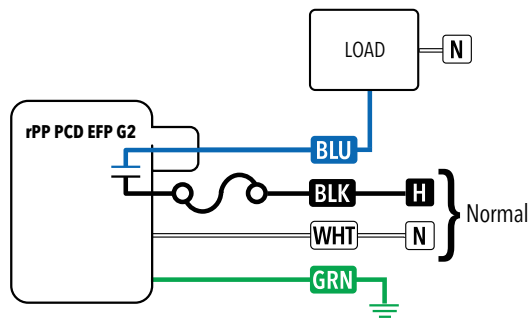
Output Ratings

| Device Type | RPP PCD, NO ENCLOSURE | RPP PCD, NO ENCLOSURE | RPP PCD IN ENCLOSURE | RPP PCD IN ENCLOSURE |
|--|-----------------------|-----------------------|----------------------|----------------------|
| Ambient Temperature | -20°C to 40°C | -20°C to 50°C | -20°C to 40°C | -20°C to 50°C |
| Operating Voltage | 120VAC - 277VAC | 120VAC - 277VAC | 120VAC - 277VAC | 120VAC - 277VAC |
| General Purpose | 16A | 14A | 12A | 10A |
| Incandescent (Tungsten) | 16A | 14A | 12A | 10A |
| Magentic Low Voltage (Inductive) | 16A | 14A | 12A | 10A |
| Electronic Low Voltage (Non-Inductive) | 16A | 14A | 12A | 10A |

Note: Where enclosures are required, such as for Chicago Plenum, enclosure dimensions should not be smaller than 12"x12"x6", and only contain one rPP PCD per enclosure.

WIRING (Do Not Wire Hot)

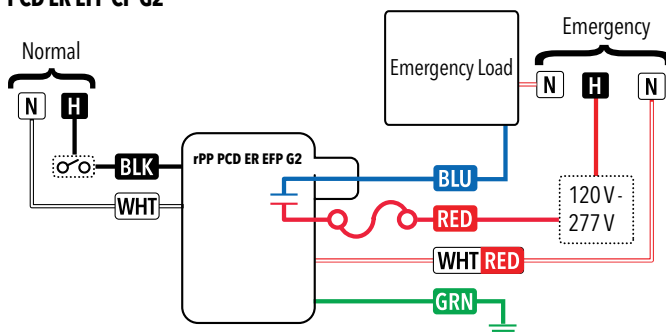
rPP PCD EFP G2 rPP PCD EFP CP G2



Legend

BLK - Unswitched Hot 120-277
WHT - Neutral
BLU - Switched Output
GRN - Ground

rPP PCD ER EFP G2 rPP PCD ER EFP CP G2



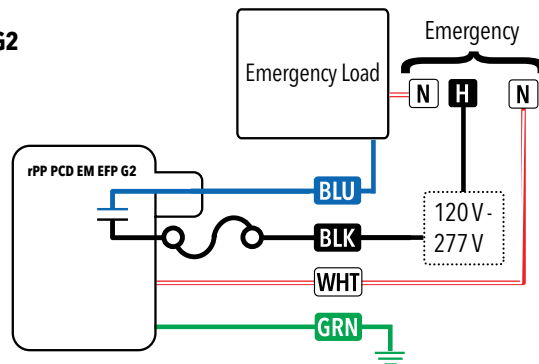
Legend

RED - Unswitched Emergency Hot 120-277
WHT/RED - Emergency Neutral
BLK - Unswitched Normal Hot 120-277
WHT - Norm. Neutral
BLU - Switched Output
GRN - Ground
Optional Test Switch (by others)

UL924 Sequence of Operation: nLight AIR Devices with ER Option

- ER devices use an unswitched normal hot to detect the presence of normal power.
- ER devices will remain at their high-end trim and ignore wireless lighting control commands when normal power is not present on the unswitched normal hot.

rPP PCD EM EFP G2 rPP PCD EM EFP CP G2



Legend

BLK - Unswitched Emergency Hot 120-277
WHT - Emergency Neutral
BLU - Switched Output
GRN - Ground

UL 924 Response - nLight AIR Devices with EM Option

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY™+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, rPP PCD, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

DIMENSIONS

