Catalog Number: | Date: | Project:

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 loads [1]
- 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 performance [2]
- Includes a replaceable fuse, which protects the device from overload and short circuit faults
- Programmable return to last state capability

rPP PCD Phase Adaptive Dimming Power Pack



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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.

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.

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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	CL**AIR**ITY™+ Mobile App

Output Ratings

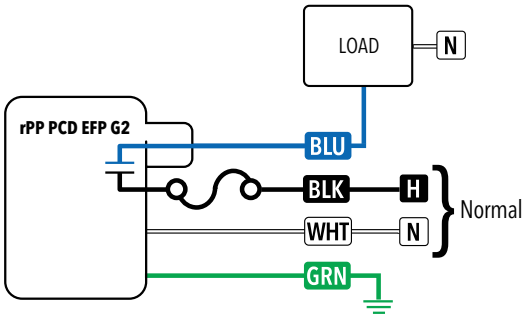
Device Type	RPP PCD, NO ENCLOSURE	RPP PCD, NO ENCLOSURE	RPP PCD IN ENCLOSURE	RPP PCD IN ENCLOSURE
Ambient Temperature	-20°C to 40°C	-20°C to 50°C	-20°C to 40°C	-20°C to 50°C
Operating Voltage	120VAC - 277VAC	120VAC - 277VAC	120VAC - 277VAC	120VAC - 277VAC
General Purpose	16A	14A	12A	10A
Incandescent (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.

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WIRING (Do Not Wire Hot)

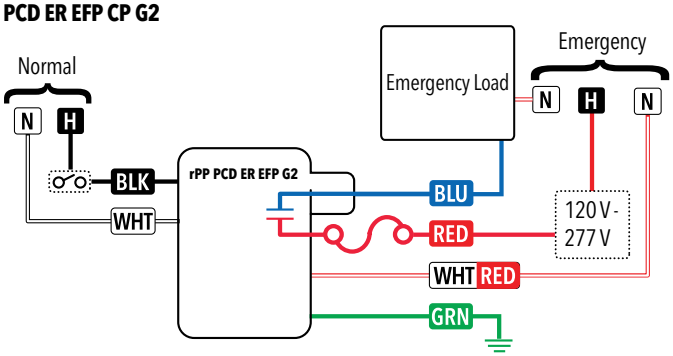
rPP PCD EFP G2
rPP PCD EFP CP G2



Legend

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

rPP PCD ER EFP G2
rPP PCD ER EFP CP G2



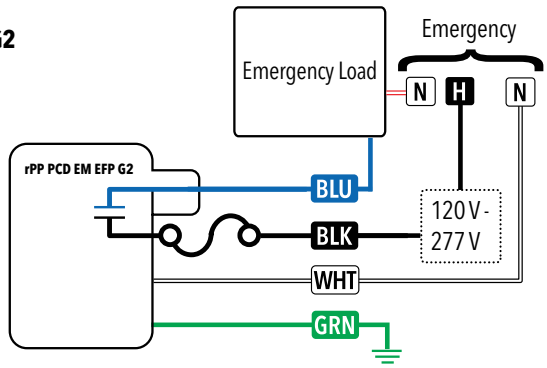
Legend

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

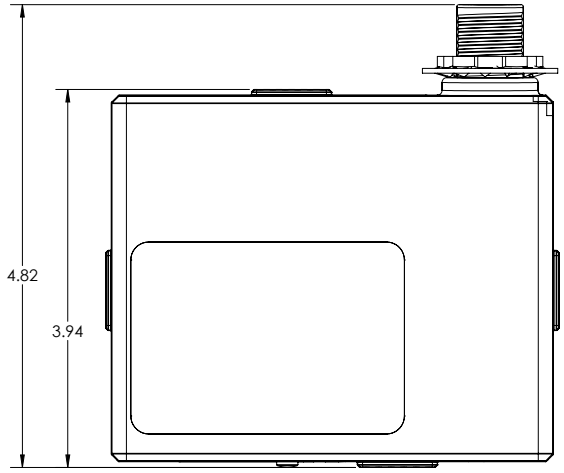
UL 924 Response – nLight AIR Devices with EM Option

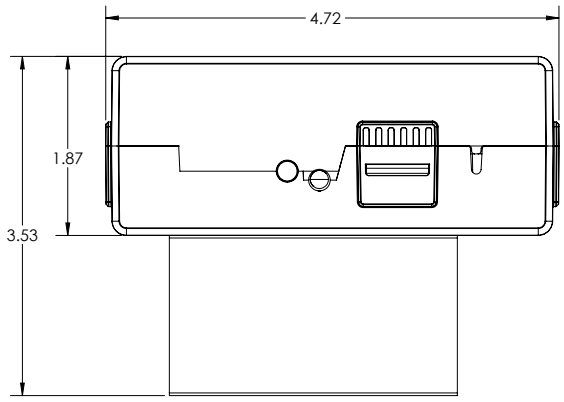
The below information applies to all nLight AIR devices with an EM option.

- 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 CL**AIR**ITY™+ 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.

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DIMENSIONS





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