Catalog Number: | Date: | Project:

OVERVIEW

The nLight nPP 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. This power pack also provides nLight system bus power - up to 40mA from each of its two RJ-45 ports - by transforming Class 1 line voltage (120-277 VAC) to Class 2 low voltage (24 VDC). This power is utilized by other nLight devices within the power pack's local control zone.

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
- Meets NEMA SSL 7A for flicker-free dimming performance[2]
- Intelligently selects appropriate dimming method
- Supplies 40mA of Bus Power per RJ-45 port
- Power Monitoring is standard with Current Measurement +/- 2% accuracy
- Push-Button Programmable
- UL 924 listed option for built in, simplified lighting control on emergency lighting circuits
- Plenum rated
- Includes a replaceable fuse, which protects the device from overload and short circuit faults
- Programmable return to last state capability

Buy American Act

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.

Build America Buy America

Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/buy-american for additional information.

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.

nLIGHT

nPP PCD Phase Adaptive Dimming Power Pack

Model #: nPP PCD EFP

Model #: nPP PCD ER EFP

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ORDERING INFORMATION

Example: nPP PCD EFP			
Series	**Emergency**	**Fault Protection**	**Buy America(n)**
nPP PCD Phase Adaptive Dimming Power Pack	[blank] None ER UL 924 Emergency Operation, via power sense leads	EFP External Fault Protection	[blank] Standard BAA Buy America(n) Act and/or Build America Buy America Qualified

ACCESSORIES	
NPP FUSE J10	Replacement Fuse

Notes:

1. See specification 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.

SPECIFICATIONS

Electrical	**Input Ratings**	120-277VAC, 50/60 Hz 120-277VAC, 50/60 Hz Normal Power Sense (with ER option)
	Relay Type	Latching with zero-cross protection
	Low Voltage Output Ratings	24VDC, 40mA per RJ-45 Port (80mA total) ER Version - Self-powering, does not supply nLight bus power
	Class Rating	Class 1
	Regulatory	Buy American Act (BAA)
Mechanical	**Dimensions**	4.82"H x 4.72"W x 3.53"D (122mm x 120mm x 90mm) - includes heat sink and ½" chase nipple
	Mounting	1/2" Knockout (7/8" hole)
	Color	White (standard), Red (ER)
	Connection Type	RJ-45 nLight Network Ports (2) Line Voltage Leads 12 AWG stranded
Environmental	**Warrantied Operating Temperature**	Standard: 14°F to 122°F (-10°C to 50°C) Standard: 14°F to 104°F (-10°C to 40°C) 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	Standard Version: UL 916 Emergency (ER) Version: UL 924 UL 2043
	RoHS	Compliant

Output Ratings

Device Type	nPP PCD, NO ENCLOSURE	nPP PCD, NO ENCLOSURE	nPP PCD IN ENCLOSURE	nPP 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

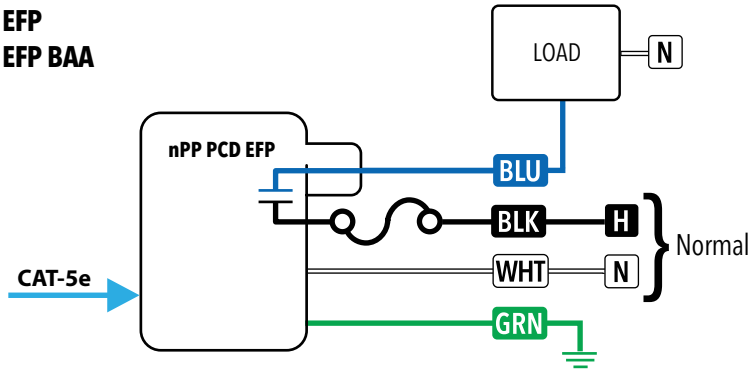
Note: Where enclosures are required, such as for Chicago Plenum, enclosure dimensions should not be smaller than 12"x12"x6", and only contain one nPP PCD per enclosure.

WIRING (DO NOT WIRE HOT)

T568B pin/pair assignment is recommended for all CAT-5e cables. For Supply Connections, use 14 AWG or larger wires rated for at least 90° C.

Diagram for standard units

nPP PCD EFP
nPP PCD EFP BAA

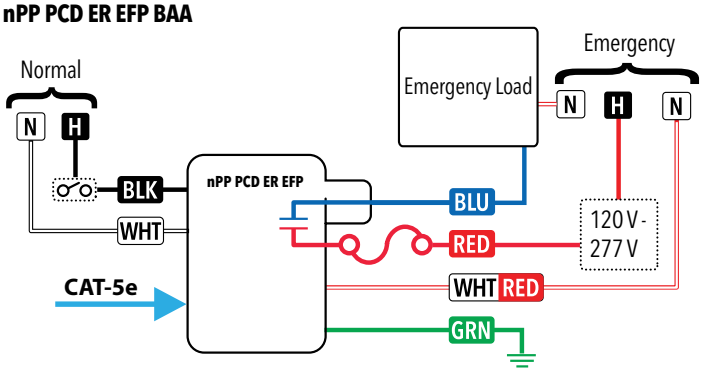


Legend

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

Diagram for units with ER (UL 924 Emergency) option

nPP PCD ER EFP
nPP PCD ER EFP BAA



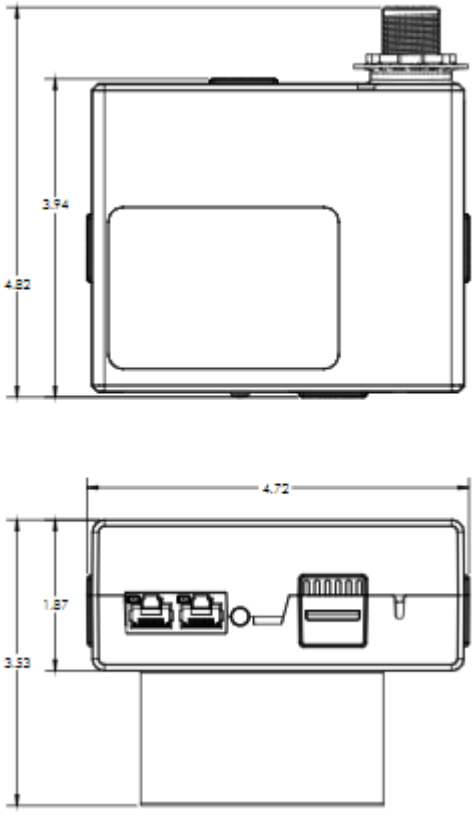
Legend

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

UL924 Sequence of Operation: When normal power sense leads have absence of voltage

- Relay is closed, dimming is at high end trim level
- Device ignores lighting control commands

DIMENSIONS



*All dimensions are in inches