

OVERVIEW

The nLight nPP16 ER EFP family of power packs is the workhorse of an nLight system, delivering robust system performance and design versatility for commercial and industrial lighting control applications. The nPP16 ER EFP switches loads via an internal latching relay designed with robust protection from the harsh switching requirements of T5 fluorescent and LED loads. Optional 0-10V dimming outputs (D or DS options) are designed with circuit isolation and provide up to 100mA of current sinking capability. The nLight nPP16 ER EFP Series relay pack is used to switch luminaires powered via an emergency circuit. The nLight nPP16 ER EFP relay pack is ideally suited for use in conjunction with a standard nnPP16 EFP power/relay pack that controls a zone's normal powered lighting.

FEATURES

- Automatically Overrides Emergency Lights On Upon Normal Power Loss
- Communicates w/ nLight Network
- Self-Contained Relay Switches Line Voltage Load
- Optional out-of-box vacancy and partial-on modes
- Remotely Configurable/Upgradeable
- Test/programming button
- Configurable Relay Logic
- Extended Chase Nipple
- Plenum rated
- Includes fuse integrated to relay wirelead for protection from load faults
- Meets NEMA410 ratings for LED/electronic ballast inrush

Warranty

Five-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

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

AcuityControls™

nLight®

nPP16 ER EFP Emergency Relay Pack



Model #: nPP16 (D) ER EFP



ORDERING INFORMATION

Series	Dimming	Emergency	Fault Protection	Default Mode	Voltage	Temp/humidity
nPP16 Power/Relay Pack	[blank] None D 0-10VDC Dimming output (via chase nipple) DS 0-10VDC Dimming output (via side slot)	ER UL924 Emergency Operation	EFP External Fault Protection	[blank] Auto On (Switch Ch. 1) SW2 Auto On (Switch Ch. 2) SA Manual On (Switch Ch. 1) SA2 Manual On (Switch Ch. 2) PA70 Auto On to 70% (Partial On) ¹ PA Auto On to 50% (Partial On) ¹	[blank] 120/277VAC 347 120/347VAC	[blank] Standard LT Low temp

1. Requires D or DS option.

SPECIFICATIONS (NPP16_ER_EFP_FAMILY)

Electrical	Input Ratings	120/277VAC, 50/60 Hz, 120/347VAC, 50/60 Hz (with 347 option), 120-277VAC, 50/60 Hz Normal Power Sense, 120-347VAC, 50/60 Hz Normal Power Sense (with 347 option)
	Output Ratings	120-347VAC, 50/60 Hz, 16A - Tungsten, Standard Ballast, Electronic Ballast, General Purpose, 120VAC, 50/60 Hz, 1/2 HP - Motor, SCCR: 5KA, 100mA, 0-10VDC Dimming Sink Current
	Relay Type	Latching
	Low Voltage Output Ratings	Self-powering, does not supply nLight bus voltage
	Class Rating	0-10V Dimming can be wired Class 1 or 2
Mechanical	Standards/ Ratings	Energy Management Equipment, UL916 (E167435), Emergency Power Equipment, UL924 (E342232)
	Dimensions	3.38"H x 2.53"W x 1.83"D (86mm x 64mm x 47mm)-does not include 1/2" chase nipple
	Mounting	1/2" Knockout (7/8" hole)
	Color	Red
	Connection Type	RJ-45 nLight Network Ports (2) Non-Dimming Model: Line Voltage Leads Dimming Model: Line and Low Voltage Leads
Environmental	Warrantied Operating Temperature	Standard: 14°F to 122°F (-10°C to 50°C), Standard: 14°F to 113°F (-10°C to 45°C) if enclosed within a junction box LT option: 4°F to 122°F (-20°C to 50°C)
	Relative Humidity	Up to 90%, Non-Condensing
	Standards/ Ratings	RoHS, Plenum UL2043
General	Standards/ Ratings	System Component to aid in compliance with Title 24, ASHRAE 90.1, IECC

WIRING

T568B pin/pair assignment is recommended for all CAT-5e cables. Unit powers itself but does not provide any bus power to other connected nLight devices.

For Supply Connections, use 14 AWG or larger wires rated for at least 90° C.

Diagram for non-dimming units

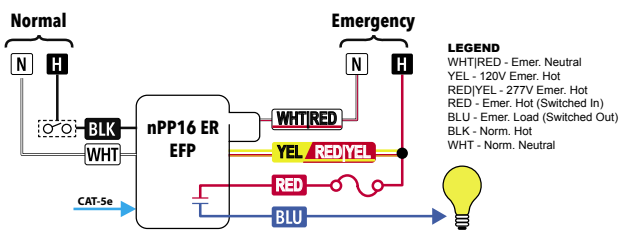
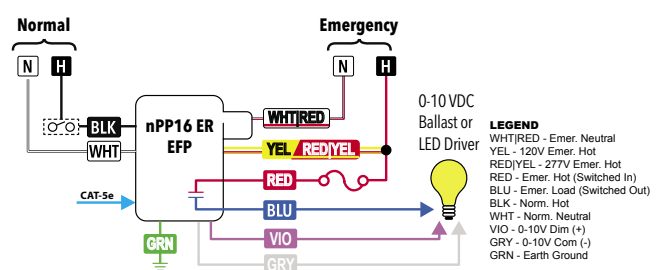


Diagram for units with a dimming option (-D or -DS suffix)



Notes

1. Connect to 120VAC or 277VAC feed ONLY. Cap off unused wire.
2. For 347V product, Red wire is 347VAC Emer. Feed
3. Normal Sense input: 120-277VAC. For 347V product: 120-347VAC

ADDITIONAL EMERGENCY (-ER) SPECIFICATION INSTRUCTIONS

PUSH-BUTTON TESTING:

As long as the relay is in the open (lights off) position and normal power is present, you are able to simulate normal power being lost by pressing and releasing the unit's push-button one time. After a few seconds the relay will close for 4 seconds, then open back up and return to normal operation. A separate push-button test switch (not included) can also be wired in as shown in above diagrams.

INTERFACING WITH A FIRE ALARM PANEL:

To interface unit to a fire alarm system such that the relay is overridden closed (lights on) upon activation of the fire alarm system, the fire alarm system must provide a normally closed line-voltage rated relay which opens when the fire alarm system is activated. This relay must be put in series with the Black power sense line on the nPP16 ER EFP. When the normally closed relay opens, the nPP16 ER EFP will close its load relay to provide egress lighting when the fire alarm system is activated.