NXP2 SERIES NX LIGHTING CONTROL PANEL

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- Meets applicable ASHRAE, IECC and Title 24 energy codes
 and requirements
- Available in 8, 16, 24, 32 and 48 relay panel sizes
- Operates as standalone panel or NX network device
- Programmable using the Bluetooth® NX Lighting Controls mobile app*
- Matching number of relays and dimming channels
- Integrated NX SmartPORTs[™] for connection of NX switches, sensors and accessories
- Optional UL924 emergency control
- Contractor friendly mounting/installation

*Requires NX Radio Bridge with Real Time Clock - included



SPECIFICATIONS

CONSTRUCTION

- Exterior:
 - NEMA 1 Enclosure (Available In surface and flush mount versions)
 - (4) Keyhole mounting holes for mounting to wall
 - Standard electrical knockouts on top, bottom and sides for low voltage and line voltage feeds
 - Hinged locking door
- Interior:
 - Allows for installation of the exterior prior to the addition of the interior electrical components
 - (4) Keyhole mounting holes for mounting to panel exterior
 - Optional metal plate barrier available to separate relays (p/n NXP2-PBAR)
- Panel Dimensions:
 - 08 Relay Panel: 20.7"L x 20.0"W x 4.0"D
 - •16 Relay Panel: 24.6"L x 20.0"W x 4.0"D
 - 24 Relay Panel: 32.6"L x 20.0"W x 4.0"D
 - 32 Relay Panel: 32.6"L x 20.0"W x 4.0"D
 - 48 Relay Panel: 40.4"L x 20.0"W x 4.0"D

ELECTRICAL

- Network Interface
 - Ethernet 10 base-T via NX Networked cable, integral 2-port Ethernet hub

ELECTRICAL (CONTINUED)

- Input Voltages
 - UNV: 120/277VAC (50/60Hz)
 - 347: 347VAC
 - 480: 480VAC
- Relay Operating Voltages
- Single Pole:
 - General Use: 30A @ 347VAC
 - Tungsten: 1960W @ 120VAC
 - (Standard) Ballast: 10A @ 3470VAC
 - Electronic Ballast: 16A @ 277VAC
 - Motor Starting: 1 HP @ 110-125VAC; 1.5HP
 @ 220-277VAC
 - Short Circuit Current Rating (SCCR) of 14,000A @ 277VAC
- Double Pole¹:
 - General Use: 20A @ 347/480VAC
 - Tungsten: 2400W @ 120VAC
 - (Standard) Ballast: 20A @ 347/480VAC
 - Motor Starting: ½ HP @ 110-125VAC; 1.5HP @ 220-277VAC
 - Short circuit Current Rating (SCCR) of 5,000A @ 277VAC
- Relay Electrical Ratings
 - Rated for minimum 60,000+ operations (30,000+ cycles) at full 20A load
 - Rated full-life with HID load





ELECTRICAL (CONTINUED)

- Relay Mechanical Ratings
 - Rated for minimum 120,000+ operations (60,000+ cycles)
- Relay Operation
 - Mechanically latching
 - Provides at-a-glance indication of ON or OFF relay status
 - Includes manual override switch (integral to the relay)
- 0-10V Dimming
 - Available on all panels
 - (8) Integrated dimming channels per Relay-Dimmer Board
 - Each dimming channel capable of sinking 50mA
 - Full support for Dim-to-Off drivers
- Class 2 Low Voltage NX SmartPORTs
 - (4) NX SmartPORTs 24VDC, 1.2A MAX (all outputs combined)
 - Supports NX switches, sensors (NXOS, NXSMP, NXDS) and accessories²
 - RS485 digital communication
- Class 2 Inputs / Outputs
 - (4) 3-Wire dry contact inputs. Each input provides connection for sourcing 24VDC, common, control and switch pilot light functionality

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SPECIFICATIONS (CONTINUED)

ELECTRICAL (CONTINUED

- Class 2 Inputs / Outputs (Continued):
 - (2) SPDT (Normally Open/Normally Closed) dry contact outputs. Each output rated for 24VDC @ 50mA.
 - Terminal Tolerance:
 - Wire size: 14, 16, 18, 20, 22 AWG
 - Recommended tightening torque: 0.45 N-m (4 in-lbs.)
- Optional UL924 Emergency Control⁴
 - Pre-installed at factory
 - When installed, panel is suitable for controlling emergency lighting circuits
 - On loss of normal power, all relays go to closed (ON) position and all dimming channels will go to 100% light output

ELECTRICAL (CONTINUED

- Bluetooth® Technology
 - Bluetooth programming using the NX Lighting Controls mobile app requires the NX Radio Bridge with Real Time Clock (p/n NXBTC) – Included

OPERATION

- Programming and Configuration
 - Programmable via Bluetooth NX Lighting Controls mobile app (available on Google Play[™] and Apple[®] App Store)



- Available on the Available on the Available on Google Play
- Programmable via web-browser user interface³

OPERATING ENVIRONMENT

- Indoor use only
- 32° to 112°F (0° to 50°C)
- Relative humidity (non-condensing): 10% to 90%

CERTIFICATIONS

- UL 916, CAN/CSA C22.2 No. 205
- UL 924, CAN/CSA C22.2 No. 141 Emergency Lighting (Requires UL924 Emergency Control Option)

WARRANTY

• 5 year limited

Notes:

- 1 Double pole relays occupy (2) relay spaces
- 2 Connection of NX actuators, bridges and radios is not supported
- 3 Requires NX Area Controller

ORDERING GUIDES

Stocked Panels

CATALOG #

Example: NXP2-PNL-16-16-U-S

Model	
NXP2-PNL-8-0-U-S	NX Lighting Control Panel V2, 8 Relay Capacity, 8 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-8-8-U-S	NX Lighting Control Panel V2, 8 Relay Capacity, 8 Dimming Channels, 8-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-16-0-U-S	NX Lighting Control Panel V2, 16 Relay Capacity, 16 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-16-16-U-S	NX Lighting Control Panel V2, 16 Relay Capacity, 16 Dimming Channels, 16-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-24-0-U-S	NX Lighting Control Panel V2, 24 Relay Capacity, 24 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-24-24-U-S	NX Lighting Control Panel V2, 24 Relay Capacity, 24 Dimming Channels, 24-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-32-0-U-S	NX Lighting Control Panel V2, 32 Relay Capacity, 32 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-32-32-U-S	NX Lighting Control Panel V2, 32 Relay Capacity, 32 Dimming Channels, 32-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-48-0-U-S	NX Lighting Control Panel V2, 48 Relay Capacity, 48 Dimming Channels, Relays Not Included, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-48-48-U-S	NX Lighting Control Panel V2, 48 Relay Capacity, 48 Dimming Channels, 48-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, Surface Mount
NXP2-PNL-8-8-9US	NX Lighting Control Panel V2, 8 Relay Capacity, 8 Dimming Channels, 8-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, UL924 Panel, Surface Mount
NXP2-PNL-16-16-9US	NX Lighting Control Panel V2, 16 Relay Capacity, 16 Dimming Channels, 16-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, UL924 Panel, Surface Mount
NXP2-PNL-24-24-9US	NX Lighting Control Panel V2, 24 Relay Capacity, 24 Dimming Channels, 24-30A/Single Pole Latching Relays, Bluetooth Radio Bridge With Real Time Clock Included, 120/277VAC, UL924 Panel, Surface Mount



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ORDERING GUIDES (CONTINUED)

Custom Panels

NXP2 _	-		_		-			-]_[]_			-	
Model	Pane	l Shipment	Pa	nel Size	S	ngle l	Pole Relay Qty	/	Double	e Pole Relay Qty		Emer	gency Control		Input	Voltage		Enclosure Mour
VXP2 NX Lighting Control Panel V2	EIT EIS ENC INT	Enclosure/ Interior Together ¹ Enclosure/ Interior Separately ¹ Enclosure Only Interior Only ¹	8 16 24 32 48	8 Relay/ Dimmer Capacity 16 Relay/ Dimmer Capacity 24 Relay/ Dimmer Capacity 48 Relay/ Dimmer Capacity		nSP	Single Pole Relay Qty		nnDP	Double Pole Relays		Blank 924C	No UL924 Control UL924 Panel		UNV 347 480	Universal Voltage (120/277VAC) 347VAC 480VAC		S Surface Mourt F Flush Mount

Stocked NXP2 Panel Accessories

CATALOG #

Example: NXP2-RL-DP

Model	
NXP2-RL2-SP	Single Pole - General Use: 30A @ 347VAC; Tungsten: 1920W @ 120VAC; (Standard) Ballast: 10A @ 347VAC; Motor Starting: 1HP @ 110-125VAC; 1.5HP @ 220-277VAC
NXP2-RL-DP	Double Pole - General Use: 20A @ 347/480VAC; Tungsten: 2400W @ 120VAC; (Standard) Ballast: 20A @ 347/480VAC; Motor Starting: 1HP @ 110-125VAC; 1.5HP @ 220-277VAC
NXP2-PBAR	NX Lighting Control Panel V2 Relay Channel Barriers – Set of two
NXP2-CNTRLBRD	NX Lighting Control Panel V2 Controller Board Replacement
NXP2-RLYDMRBRD	NX Lighting Control Panel V2 Relay/Dimmer Board Replacement

NXP2 SERIES NX LIGHTING CONTROL PANEL



Sizes

V2-8

V2-16

V2-24

V2-32

V2-48

В

17.7"

21.6"

29.6"

29.6"

37.4"

А

20.7"

24.6"

32.6"

32.6"

40.4"



Surface Mount Panel Dimensions

Note:

1 For Flush Mount Panels, add 2" to A & B dimensions

NXP2 SERIES NX LIGHTING CONTROL PANEL

ADDITIONAL INFORMATION

Panel Interior



source if panel is controlling emergency circuits.

Fully Populated 8 Relay Interior (with UL924 Option Board) Mounted in the Exterior Enclosure



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WIRING DIAGRAMS (CONTINUED)



Relay Wiring Diagrams



Low Voltage Input Wiring Diagrams



Standalone Panel Programmed Using Bluetooth Radio Bridge with Clock and NX Lighting Controls mobile app



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NXP2 SERIES

WIRING DIAGRAMS (CONTINUED)



Networked Panels Programmed Using Bluetooth Radio Bridge with Clock and NX Lighting Controls mobile app



Networked Panel Programmed Using the NX Area Controller



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