INTEGRATED LIGHTING CONTROL PANEL WITH BACNET® AND METASYS N2®

CL SERIES RELAY PANEL

NEW!

DESCRIPTION

The **CL Series** Relay Panels are open architecture relay control panels designed for integration with Building Automation Systems (BAS). The panels have Blue Ridge innovations including the Lx5 Controller and Lighting Tough Relay (LTR). The Lx5 platform features dip switch selectable BAS protocols eliminating protocol option cards, gateways, and separate networks. In addition, Lx5 is field upgradable so the latest features and protocols are only a download away.

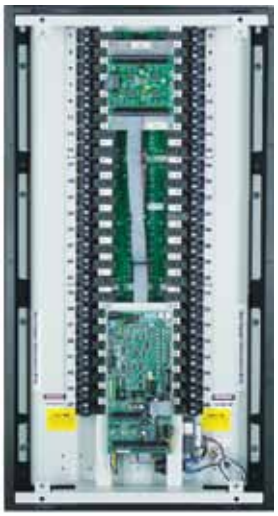
FEATURES

- ***Surface and Flush mount door styles***
- ***08, 16, 32, and 48 relay capacity***
- ***UL 924 Emergency bypass option***
- ***LTR relay rated life of 300,000 cycles at full load***
- ***Hinged locking door is field reversible***

CL08P-08

CL16P-16-00-S

CL32P-32-00-S



CI48P-48-00-S

SPECIFICATIONS

Supply Voltage	120 or 277 VAC ±10% 50 / 60 Hz
Supply VA	30 VA
Supply Frequency	50 / 60 Hz
Secondary Voltage	24 VAC ±10%
Relay Type	SPST latching with manual override, pulse drive
Short Circuit Current Rating	
SCCR	20,000 A @ 277 VAC
Relay Life Cycles	300,000
Contactor Ballast	20 A @ 277 VAC, 20 amp @ 347 VAC
Contactor Tungsten	20 A @ 120 VAC
Resistive Load	20 A @ 277 VAC, 20 A @ 347 VAC
Analog Inputs	6; 0-5 VAC light level sensor
Digital Switch Inputs	
08 and 16- relay	24 two wire or 12 three wire
32 and 48 -relay	56 two wire or 28 three wire
Relay Terminals	Screw terminal with box clamp
Wire Size	
Power	18 AWG min solid or stranded
Input	18 AWG solid or stranded, non twisted, unshielded
Relay	14-10 AWG or single AWG, solid or stranded Cu only
Network	Max length 4000 ft
Communication	
Wire	Belden 8760 or equal
Communication	
Protocol	BACnet MSTP 9600, 19200, 38400, 76800 N2 9600
Operating Temperature	32° to 125°F (0° to 50°C)
Operating Humidity	20% to 95% RH, non-condensing
Mounting	Surface, Flush
Enclosure Rating	NEMA 1, Dry / indoor environment
Approvals	IEC Level 3, FCC Part 15 Class A, UL File E133813, CEC Title 24, UL924
Warranty	2 years

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APPLICATION

The **UL924 Option Relay Interface Board** enables CL Series Relay Panels to provide energy management control of emergency lighting circuits during normal operation while maintaining emergency function during power loss. These panels monitor normal power for drop-out. When drop-out occurs UL924 forces its relays On. Once the emergency transfer switch and generator supply backup power, the emergency lighting comes to life immediately. The UL924 option includes Relay Voltage Dividers (RVD) for separated normal and emergency circuits as well as provisions for user installed indicator lamp.

SEQUENCE OF OPERATION

UL924 Option Relay Interface Board

1. Emergency circuits are controlled from the UL924 Relay Interface Board. The UL924 jumper is set for 'Emergency action Close all relays'.
2. Power loss is detected by the UL924.
3. All relays connected to the UL924 are forced ON. UL924 capacitors power emergency relay function. No external power source or input is required for UL924 operation.
4. Relays not connected to the UL924 remain in their present state (On/Off). Lighting Tough Relays (LTR) are mechanical latching type.
5. Generator transfer switch (not located in the relay panel) reacts and allows generator to feed dedicated emergency circuits previously fed by normal (utility)power. The relays connected to the UL924 are already ON, so the only possible source of delay in emergency lighting is the generator or emergency transfer switch.
6. Dedicated emergency lighting circuits will remain On while emergency power source is applied.
7. Normal power is restored and the emergency transfer switch returns all circuits to normal power.
8. Relays connected to the UL924 will remain On during and after normal power restoration.
9. Relays not connected to the UL924 remain in their present state (On/Off).
10. Normal control of all relays, including relays connected to the UL924, is restored.

DIMENSIONS AND WEIGHTS

Model	Relay Panel capacity	Enclosure			Surface Door		Flush Door		Weight
		Height	Width	Depth	Height	Width	Height	Width	
CL08	08	14.75 in (37.2 cm)	13.00 in (33.2 cm)	5.75 in (14.6 cm)	14.94 in (37.9 cm)	13.16 in (33.4 cm)	NA	NA	24 lbs (10.2 kg)
CL16	16	16.20 in (41.1 cm)	18.0 in (45.7 cm)	5.75 in (14.6 cm)	16.45 in (41.8 cm)	18.08 in (45.9 cm)	17.70 in (45.0 cm)	19.58 in (49.7 cm)	36 lbs (16.3 kg)
CL32	32	25.00 in (63.5 cm)	18.0 in (45.7 cm)	5.75 in (14.6 cm)	25.25 in (64.1 cm)	18.08 in (45.9 cm)	26.50 in (67.3 cm)	19.58 in (49.7 cm)	54 lbs (24.5 kg)
CL48	48	33.80 in (85.9 cm)	18.0 in (45.7 cm)	5.75 in (14.6 cm)	34.05 in (86.5 cm)	18.08 in (45.9 cm)	35.30 in (89.7 cm)	19.58 in (49.7 cm)	69 lbs (31.3 kg)

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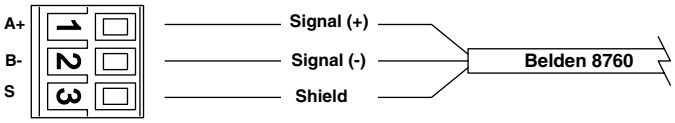
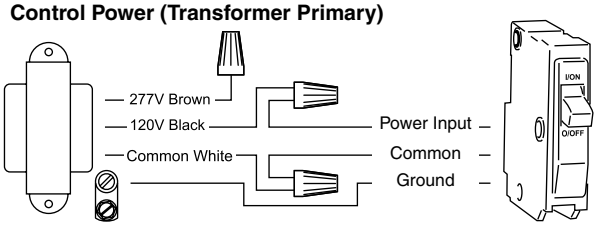
WIRING

Communication

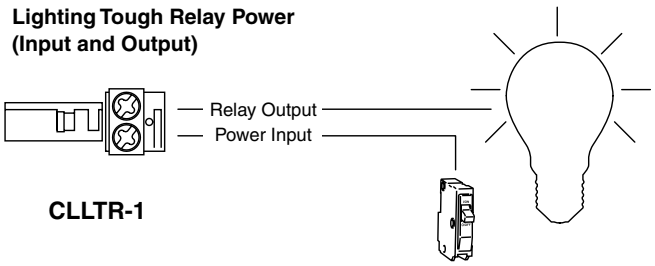
BACnet MSTP / N2 Network (input)



Control Power (Transformer Primary)

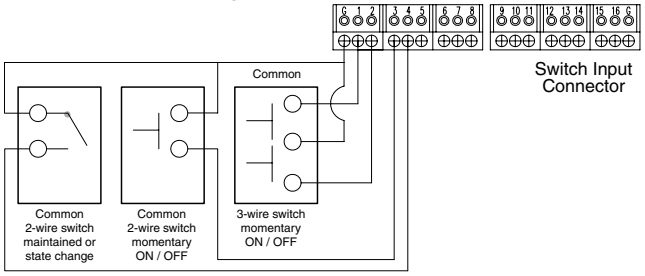


Lighting Tough Relay Power (Input and Output)



CLLTR-1

Switch Input Wiring

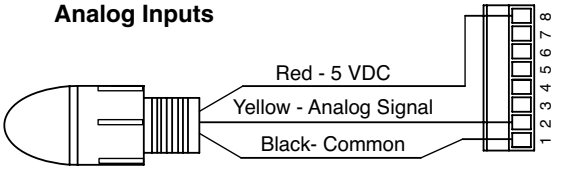


Wiring Recommendations:

Gauge: 18 AWG (non-twisted, un-shielded wire only)

Maximum Distance: 500 feet of wire between switch input connector and switch terminals

Analog Inputs



Wiring Recommendations:

Gauge: 18 AWG (non-twisted, un-shielded wire only)

Maximum Distance: 250 feet of wire between analog input connector and MK7 Light Sensor

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ORDERING INFORMATION

Model	Relay Panel Capacity	Relays Factory Installed	Digital Inputs	Analog Inputs	Mounting	UL924 option
CL08P-04	08	04	24	6	Surface	-
CL08P-08	08	08	24	6	Surface	-
CL16P-08-00-S	16	08	24	6	Surface	-
CL16P-16-00-S	16	16	24	6	Surface	-
CL16P-08-X0-S	16	08	24	6	Surface	UL924
CL16P-16-X0-S	16	16	24	6	Surface	UL924
CL16P-08-00-F	16	08	24	6	Flush	-
CL16P-16-00-F	16	16	24	6	Flush	-
CL16P-08-X0-F	16	08	24	6	Flush	UL924
CL16P-16-X0-F	16	16	24	6	Flush	UL924
CL32P-16-00-S	32	16	56	6	Surface	-
CL32P-24-00-S	32	24	56	6	Surface	-
CL32P-32-00-S	32	32	56	6	Surface	-
CL32P-16-X0-S	32	16	56	6	Surface	UL924
CL32P-24-X0-S	32	24	56	6	Surface	UL924
CL32P-32-X0-S	32	32	56	6	Surface	UL924
CL32P-16-00-F	32	16	56	6	Flush	-
CL32P-24-00-F	32	24	56	6	Flush	-
CL32P-32-00-F	32	32	56	6	Flush	-
CL32P-16-X0-F	32	16	56	6	Flush	UL924
CL32P-24-X0-F	32	24	56	6	Flush	UL924
CL32P-32-X0-F	32	32	56	6	Flush	UL924
CL48P-24-00-S	48	24	56	6	Surface	-
CL48P-32-00-S	48	32	56	6	Surface	-
CL48P-40-00-S	48	40	56	6	Surface	-
CL48P-48-00-S	48	48	56	6	Surface	-
CL48P-24-X0-S	48	24	56	6	Surface	UL924
CL48P-32-X0-S	48	32	56	6	Surface	UL924
CL48P-40-X0-S	48	40	56	6	Surface	UL924
CL48P-48-X0-S	48	48	56	6	Surface	UL924
CL48P-24-00-F	48	24	56	6	Flush	-
CL48P-32-00-F	48	32	56	6	Flush	-
CL48P-40-00-F	48	40	56	6	Flush	-
CL48P-48-00-F	48	48	56	6	Flush	-
CL48P-24-X0-F	48	24	56	6	Flush	UL924
CL48P-32-X0-F	48	32	56	6	Flush	UL924
CL48P-40-X0-F	48	40	56	6	Flush	UL924
CL48P-48-X0-F	48	48	56	6	Flush	UL924

ACCESSORIES

CLLTR-1	CL series Lighting Relay (LTR), 1 Replacement LTR for field installation
CLLV-SW1	One button, low voltage momentary switch without wall plate
CLRVD	CL series Relay Voltage Divider
CLUSB-TK	Configuration software for CL Lighting Panel
MK7-B	Lignt Sensor Series