

Overview

CL Series Relay Panels (RP) are open architecture relay control panels designed for integration with Building Automation Systems (BAS). RP features several Blue Ridge innovations including the Lx5 Controller and Lighting Tough Relay (LTR).

The Lx5 platform features multiple 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.

The LTR provides maximum reliability and performance for direct load control. The LTR has a rated life of 300,000 cycles at full load and a Short Circuit Current Rating (SCCR) of 20,000 amps at 277VAC.

The 08 RP unites the power of BAS integration with a compact package for the ideal small project solution.



General Specifications

8 Relay

Relay Capacity : Control up to 8 relays

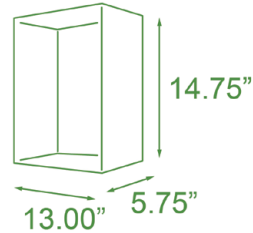
Input Capacity : 24 two wire or 12 three wire switch inputs

Dimensions

Enclosure : 14.75"(375mm)H x 13.00"(330mm)W x 5.75"(146mm)D

Door Surface Mount : 14.94"(379mm)H x 13.16"(334mm)W

Enclosure



Surface Door





General Specifications

Construction

16ga steel with powder coat finish

Environmental

Operating Temperature 32° to 125° F (0° to 50° C)

Operating Humidity 20% - 95%RH, non-condensing

RP enclosures are NEMA 1 rated and must be mounted in a dry / indoor environment.

System Certification

Electronics meet or exceed IEC Level 3 standards:

Radiated Emissions, IEC 55022, Class A

Conducted Emissions, IEC 55022, Class A

Quasi-Stationary Current Harmonics, IEC 6100-3-2

Voltage Fluctuation and Flicker, IEC 6100-3-2

Electrostatic Discharge, IEC 61000-4-2

Electrical Fast Transient/Burst, IEC 6100-4-4

Surge Immunity, IEC 6100-4-5

Immunity to Conducted Disturbance, IEC 6100-4-6

Immunity to Voltage Dips, Short Interruptions, Voltage Variations, IEC 6100-4-11

Electromagnetic Compatibility Generic Immunity Standard. Part 1, IEC 6100-6-1

FCC, Part 15, Class A Radiated Emissions

FCC, Part 15, Class A Conducted Emissions

Assembly meets or exceeds the following standards:

Underwriters Laboratories, UL 916, Standard for Energy Management Equipment

FCC, Part 15, Class A Radiated Emissions

FCC, Part 15, Class A Conducted Emissions

CEC Title 24, California Energy Commission



Line Voltage Specifications

Control Power

Transformer Primary : 120 or 277 VAC +/- 10%, 30 VA, 50 / 60 Hz
Transformer Secondary : 24 VAC +/- 10% Inherently Limited
Wire : 18 AWG Minimum (Solid or Stranded)

Lighting Tough Relays (LTR)

Relay Ratings

Tungsten 20 amp @ 120 VAC
Ballast 20 amp @ 277 VAC
Ballast 20 amp @ 347 VAC
Resistive 20 amp @ 277 VAC
Resistive 20 amp @ 347 VAC

Relay Details

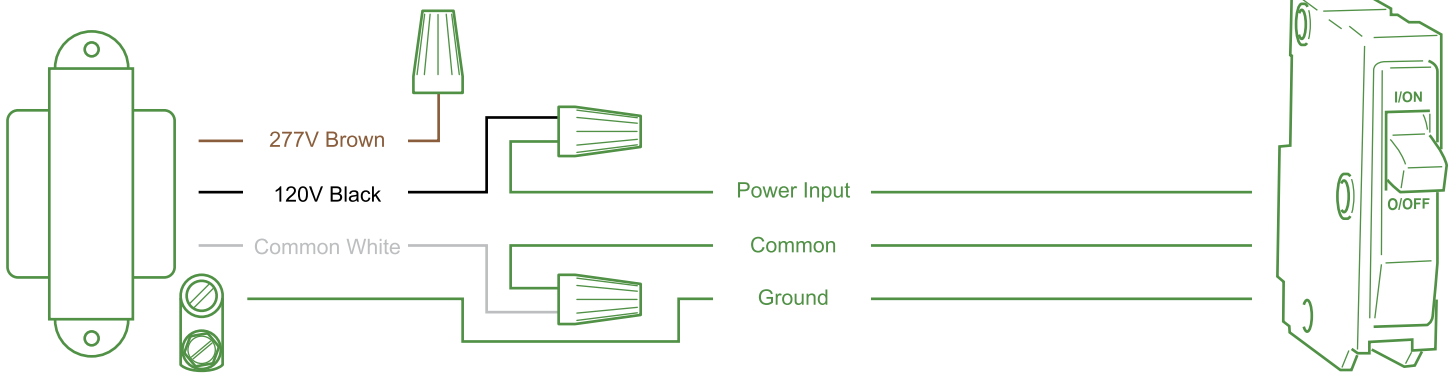
UL Listed
SPST latching with manual override
Pulse Driven
Short Circuit Current Rating (SCCR) 20,000 Amps @ 277 VAC

Relay Load Wire Terminations

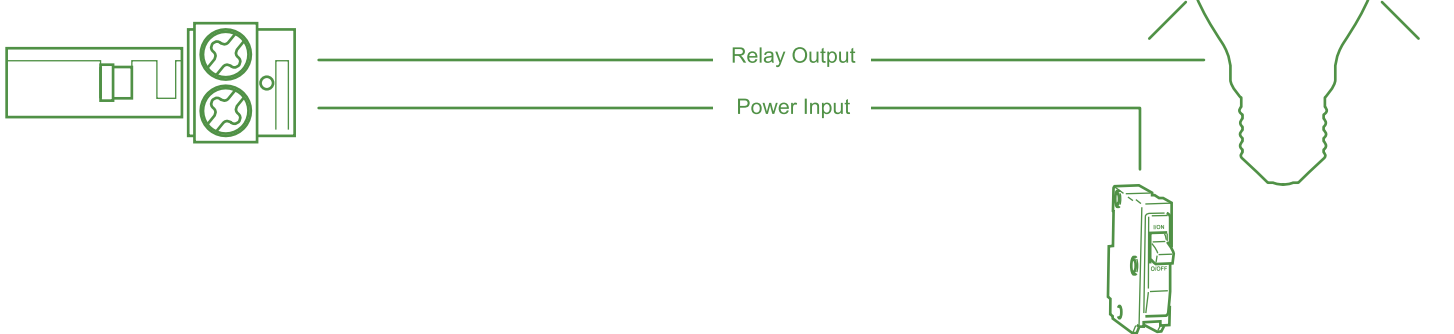
Screw terminal with box clamp
Accepts double 14-10 AWG or single 8 AWG
(Solid or stranded copper wire only)

Line Voltage Connections

Control Power (Transformer Primary)



Lighting Tough Relay Power (Input and Output)





Low Voltage Specifications

BAS Network Connections

Protocols : BACnet MSTP (9600, 19200, 38400, or 76800), N2 (9600)

Wire : Belden 8760 or equal

Maximum Network Length : 4000 ft

Switch Inputs : Dry Contact

Wire : 18 AWG (Solid or Stranded, non twisted, un-shielded wire only)

Maximum Wire Length : 500 ft

(Inputs are configured in 8 Input segments, entire segment must be Dry Contact)

Switch Inputs : Externally Powered

Wire : 18 AWG (Solid or Stranded, non twisted, un-shielded wire only)

Maximum Wire Length : 1000 ft

(Inputs are configured in 8 Input segments, entire segment must be Powered)

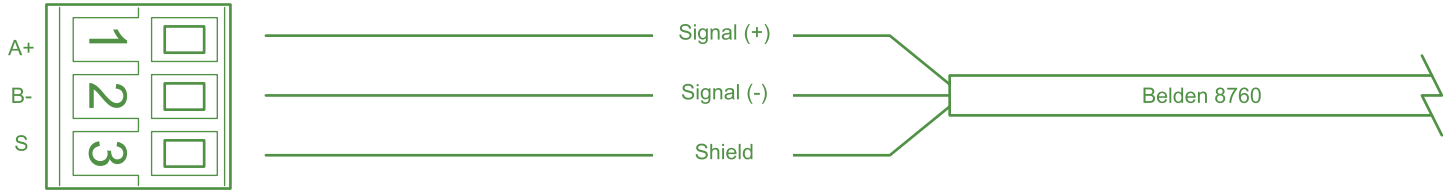
Analog Input : 0-5V Light Level Sensor

Wire : 18 AWG (Solid or Stranded, non twisted, un-shielded wire only)

Maximum Wire Length : 250 ft

Low Voltage Connections

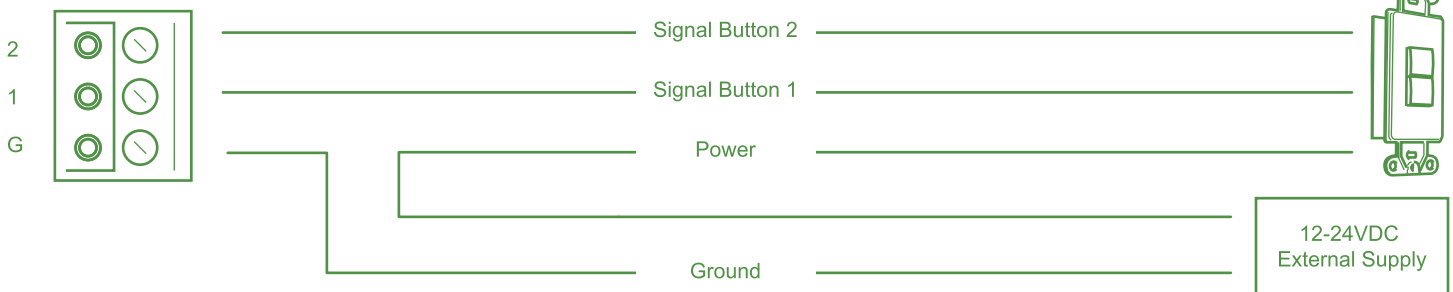
BACnet MSTP Network (Input)



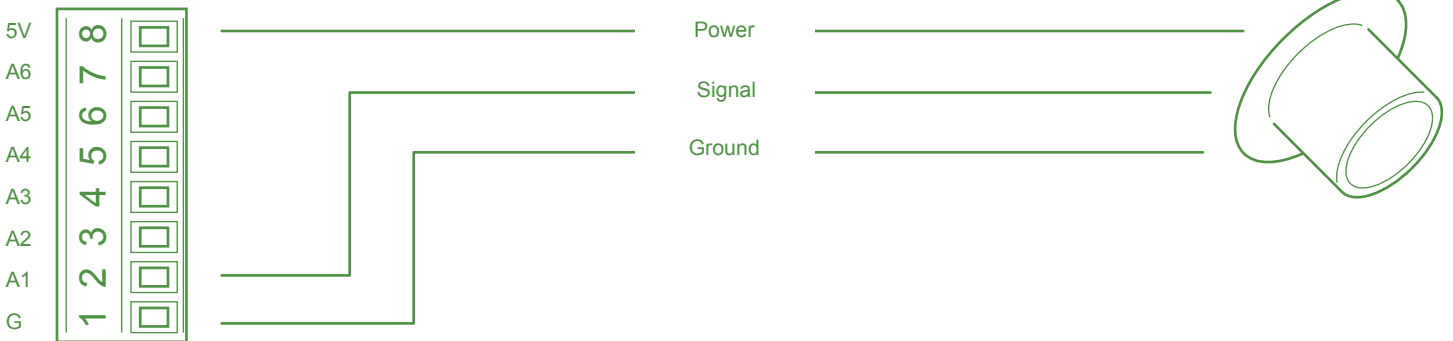
Switch Input (Dry Contact : Low Voltage Switch)



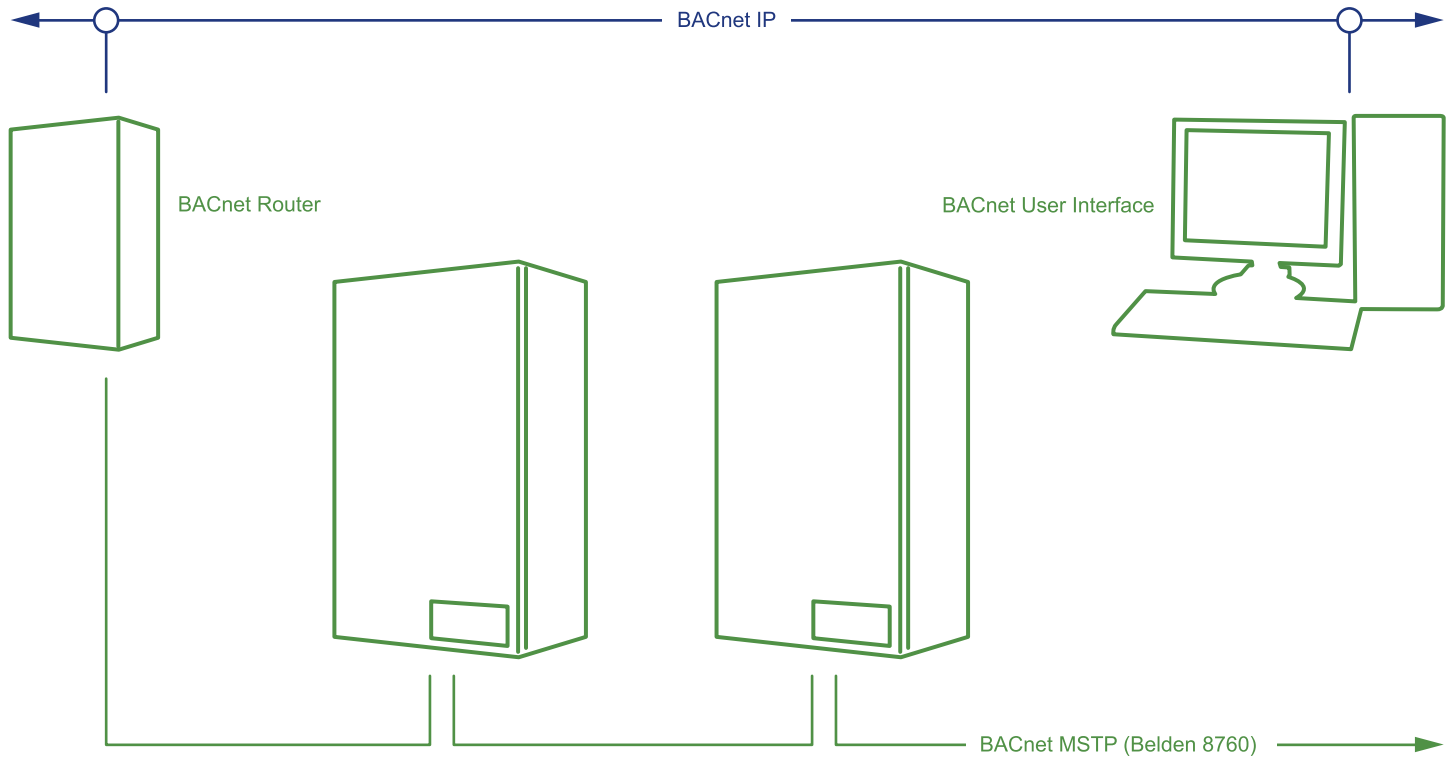
Switch Input (Externally Powered : Low Voltage Switch)



Analog Input (5V Light Level Sensor)



General System Architecture



Part Number Guide

Part Number	Description
CL08P00	CL Series Relay Panel, 08 Relay Capacity, 0 Relays Installed, 24 Switch Inputs, 6 Analog Inputs
CL08P08	CL Series Relay Panel, 08 Relay Capacity, 08 Relays Installed, 24 Switch Inputs, 6 Analog Inputs
CLLTR1	CL Series Lighting Relay Tough (LTR), 1 Replacement LTR for Field Installation
CLLTR-100	CL Series Lighting Relay Tough (LTR), 100 for Field Installation, Master Pack
CLLTR-250	CL Series Lighting Relay Tough (LTR), 250 for Field Installation, Master Pack
CLLTR-500	CL Series Lighting Relay Tough (LTR), 500 for Field Installation, Master Pack