

Overview

Relay Panel (RP) is a UL Listed lighting control panel. RP may be scheduled from any BACnet BAS and is compatible with all low voltage switches, occupancy sensors, and light level sensors. RP mounts near the circuit breaker panel to provide centralized control of branch lighting circuits. Relay Panel 16 (RP16) features up to 16 Lighting Tough Relays (LTR) in a black powder coated steel enclosure with a hinged reversible door.

Features

- BTL Listed, UL Listed
- Dimming (DLH / Presets)
- BACnet MS/TP communication to BAS network
- CANbus network for Satellite and Capacitive Touch Stations (CTS)
- Line and low voltage compartment separation
- Upgradable Controller Board firmware
- Available options:
 - Low/Line Voltage Bays
 - Multi-pole Lighting Contactors
 - 24VAC Auxiliary Transformer
 - 24VDC Power Supply
 - BACnet IP Router
 - UL924 Emergency Bypass
 - 347VAC Transformer

General Specifications

Construction: 16ga steel with black powder coat finish

Dimensions:

- Enclosure: 16.20"(411mm)H x 18.00"(457mm)W x 6.25"(159mm)D
- Door Surface Mount: 16.45"(418mm)H x 18.08"(459mm)W
- Door Recessed (Flush): 17.70"(450mm)H x 19.58"(497mm)W

Weight: 32lbs(14.5kg)

Mounting: Surface or recess mounted

Operating Environment: 32-125°F (0-50°C), 20-95%RH, non-condensing, Type 1 (dry / indoor environment)

Certifications

BTL Listed, UL Listed, UL916/UL924, US/Canada
 Seismic Rating 2012 ICC-ES AC156, Importance Factor 1.5

Warranty

Five (5) year limited manufacturer warranty from date of shipment (extended warranty optional).

Firmware Specifications (Controller Board)

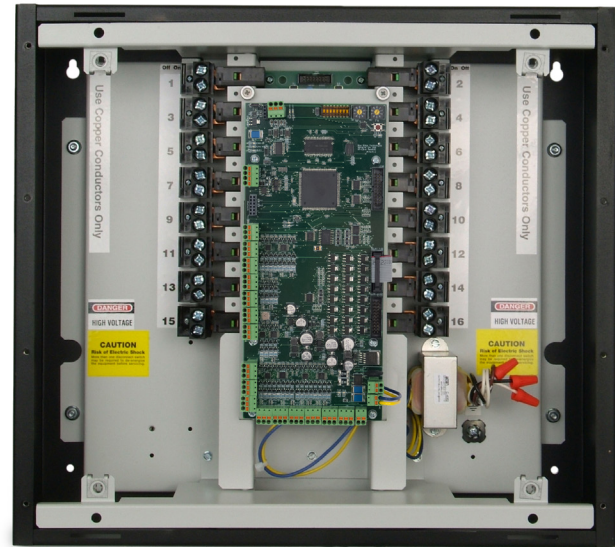
Platform: Aperio Open Control Platform
 Time Clock: Real-time clock with BACnet time sync
 Schedule: BACnet Schedule, Monday – Sunday, Holidays, and Exceptions
 Non-Volatile Memory: 16MB total, 2MB for trend data (15min trend requires 2K per day)
 RAM: 2MB total, data stored in non-volatile memory upon power loss
 Configuration: Tech Kit 2.0 (see data sheet for details)
 Configuration Connection: Micro-B USB or Bluetooth Wireless

Low Voltage Specifications (Controller Board)

Power In: 24VAC +/-10%, 30VA, 50-60 Hz
 Auxiliary Out: 24VAC, 800mA (devices with full wave rectified power supply only)
 Universal Input (UI) and CANbus Network Power Out: 24VDC, 200mA total
 Universal Input: 24 two-wire inputs
 Universal Input Software Configuration:

- Digital Input (DI)
- Analog Input (AI): 0-5VDC, 0-10VDC, or 4-20mA

 Universal Input Wire Requirement / Maximum Length: 18AWG (Solid or Stranded) / 500'(152m)



BAS Network Specifications

Protocol: BACnet MS/TP
 Baud Rate: DIP switch selectable 9.6K, 19.2K, 38.4K, 76.8K, or 115.2K
 Device Profile: BACnet Application Specific Controller (B-ASC)
 Address Range: 1 – 99 selectable with rotary dials
 Unit Load: 1/8 unit load
 Topology: RS-485, half duplex, daisy chain wiring
 Wire Requirement / Maximum Length: CL3P, 22AWG, 2 conductor, shielded, low cap / 4000'(1216m)
 Points: See PIC Statement

CANbus Specifications

Compatible with CTS and Satellite devices. See data sheet for details.

Transformer Specifications

Type: 40VA Inherently Limited UL Listed
 Primary: Multi Tap 120, 208, 240, or 277VAC +/-10%, 40VA, 50-60 Hz
 Secondary: 24VAC +/-10% Inherently Limited
 Wire Requirement: 18AWG Minimum (Solid or Stranded)

LTR Specifications

Type:

- UL Listed
- SPST latching with manual override lever
- Electrically operated mechanically held, pulse driven
- Short Circuit Current Rating (SCCR) 40,000A @ 277 VAC

 Maximum Ratings: Tungsten 20A @ 347VAC / Magnetic Ballast 30A @ 347VAC / Electronic Ballast 16A @ 347VAC / Resistive 20A @ 347VAC / 1.5HP @ 120VAC
 Load Terminal: Universal screw terminal, box type clamp
 Terminal Capacity (per side): (2) 14-10AWG or (1) 8AWG (Solid or Stranded copper wire)

Optional Equipment Specifications

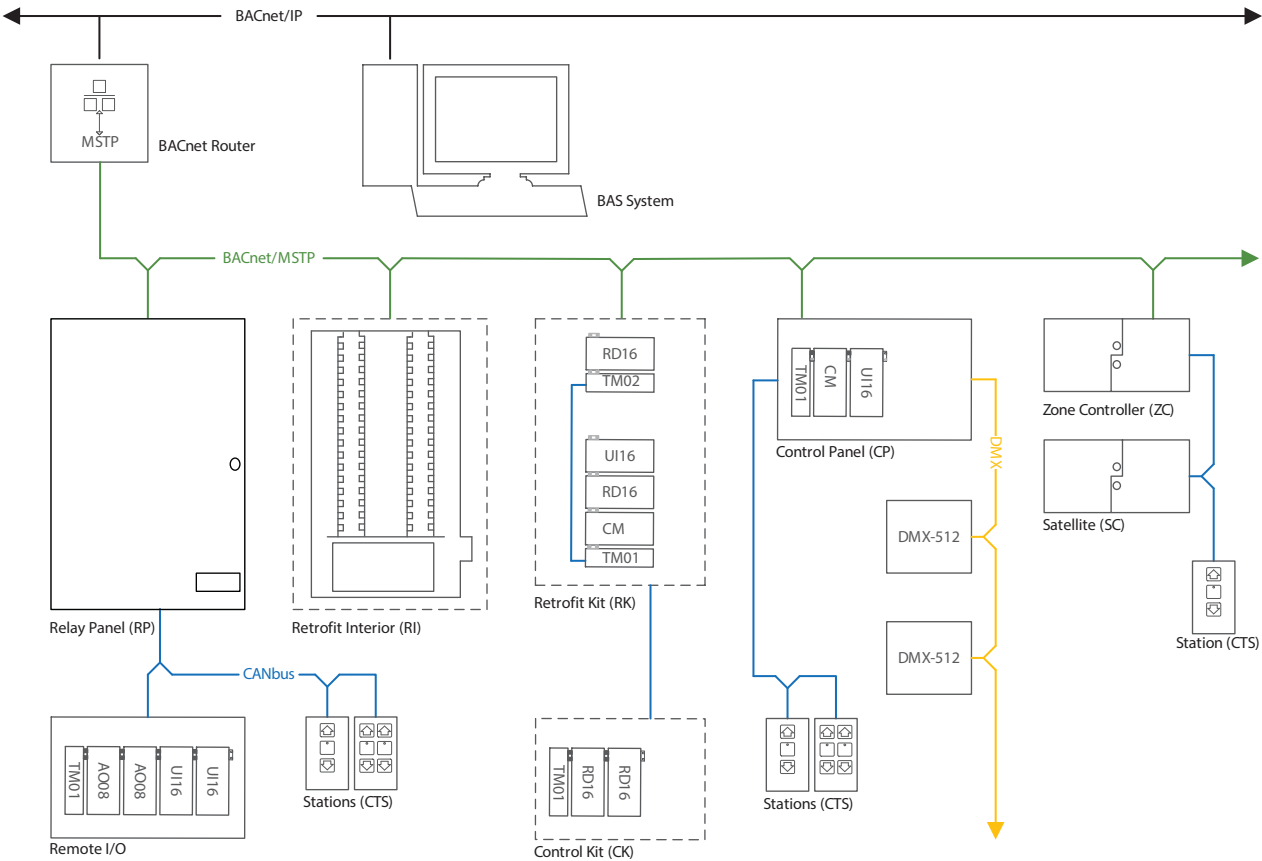
See Relay Panel Optional Equipment Data Sheet

Relay Panel 16

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System Architecture

Data Sheet : Catalog Page 9



Ordering Information

RPDY16 - XX - X - XX - XX - XX

Controller Options Y = S Dimming Standard Y = L Dimming Standard with Load Status Y = X Dimming Standard with Load Status and UL924 on all relays	Special Options XX = 00 None
Quantity of Relays Installed XX = 08 8 Relays Installed XX = 12 12 Relays Installed XX = 16 16 Relays Installed	Low Voltage Bay Options (Bottom of Panel) XX = 00 No Bay L1 9" Bay L2 (2) 9" Bay LC 9" Bay + (1) BACnet IP Router LP (2) 9" Bays + (1) BACnet IP Router 01 9" Bay + (1) MIO-TB1 + (1) MIO-UI16 10 9" Bay + (1) MIO-TB1 + (1) MIO-AO08 11 9" Bay + (1) MIO-TB1 + (1) MIO-AO08 + (1) MIO-UI16
Power Options X = 0 120 / 277VAC Transformer 1 347VAC Transformer 2 120 / 277VAC Transformer + 120 / 277VAC Auxiliary Transformer 3 347VAC Transformer + 347VAC Auxiliary Transformer 4 120 / 277VAC Transformer + 24VDC 2.5A Power Supply in Low Bay 5 120 / 277VAC Transformer + 120 / 277VAC Auxiliary Transformer + 2.5A Power Supply in Low Bay 6 Control Power Transformer 30VA + (2) 2.5A Power Supplies in Low Bay 7 Control Power Transformer 30VA + Auxiliary Transformer 30VA + (2) 2.5A Power Supplies in Low Bay	Line Voltage Bay Options with Dead Front Cover (Top of Panel) XX = 00 No Bay H1 9" Bay H2 (2) 9" Bays IP Add BACnet IP Router to Low Bay 11 (1) 4-Pole 120V Coil Contactor 12 (2) 4-Pole 120V Coil Contactors