Relay Panel 64 Basic

Project | Part Number | Ref.

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Overview
Relay Panel Basic (RP Basic) is a UL Listed lighting control panel. RP Basic may be scheduled from any BACnet BAS and is compatible with all low voltage switches as well as occupancy sensors. RP Basic mounts near the circuit breaker panel to provide centralized control of branch lighting circuits. Relay Panel 64 Basic (RP64 Basic) features 32 to 64 Lighting Tough Relays (LTR) in a black powder coated steel enclosure with a hinged reversible door.

Features
UL Listed
BACnet MS/TP communication to BAS network
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: 42.60”(1082mm)H x 18.00”(457mm)W x 5.75”(146mm)D
  Door Surface Mount: 42.85”(1088mm)H x 18.08”(459mm)W
  Door Recessed (Flush): 44.10”(1120mm)H x 19.58”(497mm)W
Weight: 82.5lbs(37.4kg)
Mounting: Surface or recess mounted
Operating Environment: 32-125°F (0-50°C), 20-95%RH, non-condensing, Type 1 (dry / indoor environment)

Certifications
UL Listed, UL916 Standard for Energy Management Equipment, US/Canada
FCC Part 15
CEC Title 24
Electronics meet or exceed IEC Level 3

Warranty
Two (2) 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) 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 Advance Application Controller (AAC)
Address Range: 1 – 99 selectable with rotary dials
Unit Load: Full unit load, 32 devices per MS/TP segment
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*

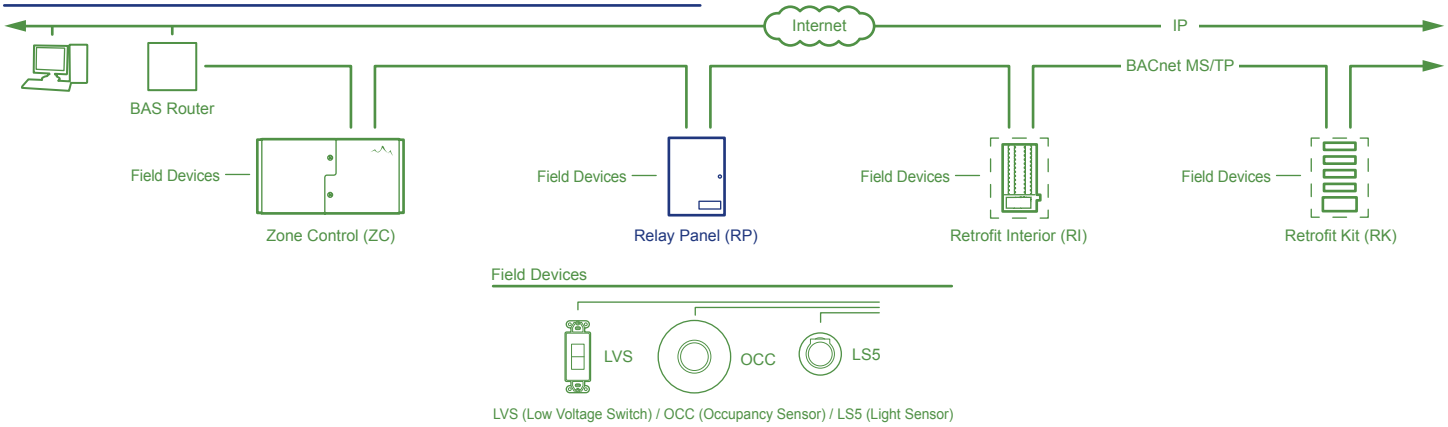
Transformer Specifications
Type: 30VA Inherently Limited
Primary: Dual Tap 120 or 277VAC +/-10%, 30VA, 50-60 Hz
Secondary: 24VAC +/-10% Inherently Limited
Wire Requirement: 18AWG Minimum (Solid or Stranded)

LTR Specifications
Type:
  UL Listed
  SPST latching with manual override lever
  Electrically operated mechanically held, pulse driven
  Short Circuit Current Rating (SCCR) 30,000A @ 277 VAC
Maximum Ratings: Tungsten 20A @ 347VAC / Ballast 30A @ 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)

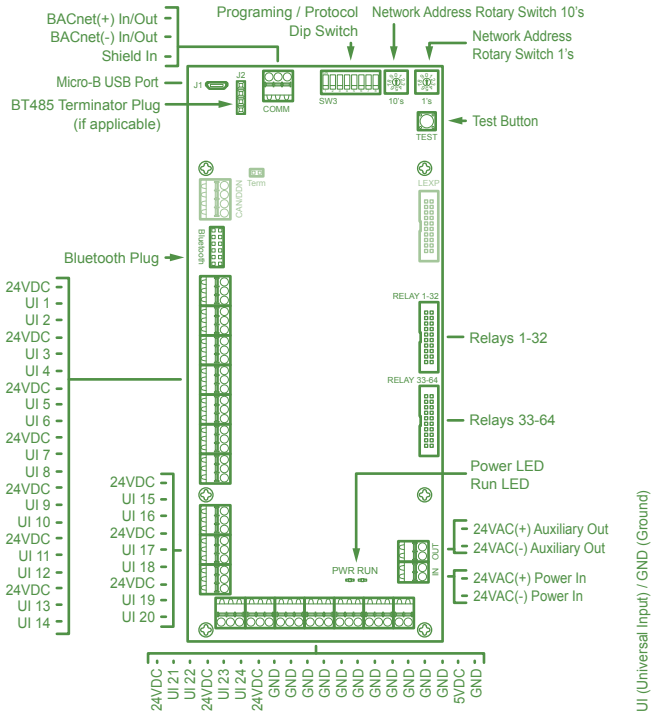
Optional Equipment Specifications
See Relay Panel Optional Equipment Data Sheet

Relay Panel 64 Basic

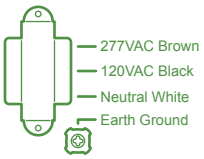
General Architecture



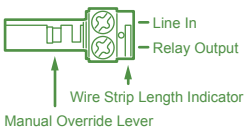
Controller Board Terminations



Transformer Terminations



LTR Terminations



Ordering Information*

RPSB64 - XX - X - XX - XX - XX

Quantity of Relays Installed

XX = 32 thru 64	32 to 64 Relays Installed

Power Options

X = 0	120 / 277VAC Transformer
1	347VAC Transformer
2	120 / 277VAC Transformer + 120 / 277VAC Auxiliary Transformer
3	347VAC Transformer + 347VAC Auxiliary Transformer

Special Options

XX = 00	None
X1	UL924 Emergency Bypass

Low Voltage Bay Options (Bottom of Panel)

XX = Blank	None
L1	9" Bay
LA	9" Bay + (1) 2.5A 24VDC Power Supply
LB	9" Bay + (2) 2.5A 24VDC Power Supply
LC	9" Bay + (1) BACnet IP Router
LD	9" Bay + (1) BACnet IP Router + (1) 2.5A 24VDC Power Supply
LE	9" Bay + (1) BACnet IP Router + (2) 2.5A 24VDC Power Supply

Line Voltage Bay Options with Dead Front Cover (Top of Panel)

XX = Blank	None
H1	9" Bay
HA	9" Bay + (1) 4 Pole 30A Electrically Held Lighting Contactor, 120V Coil
HB	9" Bay + (2) 4 Pole 30A Electrically Held Lighting Contactor, 120V Coil
HC	9" Bay + (4) 4 Pole 30A Electrically Held Lighting Contactor, 120V Coil
HD	9" Bay + (1) 4 Pole 30A Electrically Held Lighting Contactor, 277V Coil
HE	9" Bay + (2) 4 Pole 30A Electrically Held Lighting Contactor, 277V Coil
HF	9" Bay + (4) 4 Pole 30A Electrically Held Lighting Contactor, 277V Coil

* See Price List for Recessed (Flush) door panels.