

# RPM

## Relay Panel Enclosure, Relay Panel Module, and Relay

Date: \_\_\_\_\_

Quantity: \_\_\_\_\_

Company: \_\_\_\_\_

Project: \_\_\_\_\_



**Relay Panel Enclosure** is an addressable lighting control panel that allows each relay to be individually controlled and configured to best meet the needs of the facility. Lighting Control strategies such as time scheduling, occupancy control, and daylight harvesting can be deployed through the use of the Relay Panel Enclosure. Each Relay in the Relay Panel Enclosure is addressed individually. Multiple Relay Panel Enclosures can be daisy-chained as part of the overall system architecture through the GreenBus™ communication network.

**Relay Panel Module** is an electronic retrofit module that enables existing relay panels/boxes to be integrated with Encelium X. The Relay Panel Module can be installed in most standard relay panels utilizing existing electrical wiring and relays. It is mounted in the center of the existing panel (replaces old circuiting) and is wired to the existing relays in the panel. This allows each Relay to be addressed individually.

Each **Relay** connected to a relay panel module is individually addressable and provides all of the benefits and control strategies in the Lighting Control System.

### Key Features & Benefits

- Maximum of 24 Relays per Relay Panel Enclosure. Multiple Relay Panel Enclosures can be connected together to accommodate requirements above 24 relays
- Easy wiring and connection with GreenBus
- Meets UL916 (Energy Management Equipment) and Emergency rated Relay Panel Enclosure meets UL924 (Emergency Lighting Equipment)
- Each Relay Panel Enclosure is individually addressable, controlled as a zone, or as part of a larger zone, and is managed by Polaris™ software
- Works with:
  - Encelium X
  - Encelium Extend

# Specifications

## SENSING AND CONTROL

### Controls

- 2-wire relays (NAED 45349: RLY-700)<sup>1</sup> – Relay Panel Module

### Communication Bus

- Connects to the polarity independent Encelium X Lighting Control System via two ports that accept GreenBus Communication Bus

### Maximum Number of Relays

- Up to 24 Relays per Relay Panel Enclosure. Multiple Relay Panel Enclosures can be connected together to accommodate requirements above 24 relays Install in accordance with all applicable national and local electrical and building codes

## ELECTRICAL

### Relay Panel Module Power Supply

- 24 VAC, 50/60 Hz, 1.6 A (40 VAC)

### Input Voltage

- 120 to 347V

### Maximum Load

- 20A per Relay

## ENVIRONMENTAL

### Ambient Temperature

- 60°C (140°F) maximum

## PHYSICAL

### Dimensions (H x W x D)

- Relay  
96.8 x 60 x 25.4 mm (3.8 x 2.4 x 1 inches)
- Relay Panel Module  
40.6 x 45.7 x 368.3 mm (1.6 x 1.8 x 14.5 inches)
- Relay Panel Enclosure  
495.3 x 470 x 101.6 mm (19.5 x 18.5 x 4 inches)

### Weight

- 0.18 kg (6.3 oz) – Relay
- 0.39 kg (13.7 oz) – Relay Panel Module
- 23.6 kg (832.5 oz) – Relay Panel Enclosure

### Housing Color

- White – Relay
- Gray – Relay Panel Module
- Black – Relay Panel Enclosure

### Housing Material

- Plastic – Relay
- Plastic – Relay Panel Module
- Metal – Relay Panel Enclosure

### Mounting Option

- Wall Mount (Relay Panel Enclosure)
- DIN Rail Mounting, 35 mm (1.38 inches) size (Relay Panel Module)

## WARRANTY

- For warranty details, refer to full warranty documentation at encelium.com

## CERTIFICATIONS & SAFETY

### Approbations

- UL 916 (Energy Management Equipment)
- UL 924 (Emergency Lighting Equipment)
- FCC Part 15, Class A/ICES-003, Class A

### Environmental Suitability

- Rated for Indoor Use

### Complies with Electromagnetic Compatibility (EMC) Standards:

- EN 61000-4-2
- EN 61000-4-4
- EN 61000-4-5



## Ordering Information

### Relay

Item Number	Ordering Code	Description	Approbations	Communication Network	Modifiers
45349	RLY-700	Relay	UL	GreenBus	–

### Relay Panel Module

Item Number	Ordering Code	Description	Approbations	Communication Network	Modifiers
45268	EN-RPM-24C-GB2	Relay Panel Module	UL	GreenBus	UL924 Emergency Rated
45559	EN-RPM-24CNE-GB2	Relay Panel Module	UL	GreenBus	Not UL924 Emergency Rated

Footnotes:

<sup>1</sup> Other relays also available/controllable.

## Ordering Information (cont.)

### Relay Panel Enclosures<sup>2</sup>

Item Number	Ordering Code	Description	Number of Relays	RATINGS
45500	EN-RPA0R120-347V	Relay Panel Enclosure	0	UL924 Emergency Equipment
45501	EN-RPA1R120-347V	Relay Panel Enclosure	1	UL924 Emergency Equipment
45502	EN-RPA2R120-347V	Relay Panel Enclosure	2	UL924 Emergency Equipment
45503	EN-RPA3R120-347V	Relay Panel Enclosure	3	UL924 Emergency Equipment
45504	EN-RPA4R120-347V	Relay Panel Enclosure	4	UL924 Emergency Equipment
45505	EN-RPA5R120-347V	Relay Panel Enclosure	5	UL924 Emergency Equipment
45506	EN-RPA6R120-347V	Relay Panel Enclosure	6	UL924 Emergency Equipment
45507	EN-RPA7R120-347V	Relay Panel Enclosure	7	UL924 Emergency Equipment
45508	EN-RPA8R120-347V	Relay Panel Enclosure	8	UL924 Emergency Equipment
45509	EN-RPA9R120-347V	Relay Panel Enclosure	9	UL924 Emergency Equipment
45510	EN-RPA10R120-347V	Relay Panel Enclosure	10	UL924 Emergency Equipment
45511	EN-RPA11R120-347V	Relay Panel Enclosure	11	UL924 Emergency Equipment
45512	EN-RPA12R120-347V	Relay Panel Enclosure	12	UL924 Emergency Equipment
45513	EN-RPA13R120-347V	Relay Panel Enclosure	13	UL924 Emergency Equipment
45514	EN-RPA14R120-347V	Relay Panel Enclosure	14	UL924 Emergency Equipment
45515	EN-RPA15R120-347V	Relay Panel Enclosure	15	UL924 Emergency Equipment
45516	EN-RPA16R120-347V	Relay Panel Enclosure	16	UL924 Emergency Equipment
45517	EN-RPA17R120-347V	Relay Panel Enclosure	17	UL924 Emergency Equipment
45518	EN-RPA18R120-347V	Relay Panel Enclosure	18	UL924 Emergency Equipment
45519	EN-RPA19R120-347V	Relay Panel Enclosure	19	UL924 Emergency Equipment
45520	EN-RPA20R120-347V	Relay Panel Enclosure	20	UL924 Emergency Equipment
45521	EN-RPA21R120-347V	Relay Panel Enclosure	21	UL924 Emergency Equipment
45522	EN-RPA22R120-347V	Relay Panel Enclosure	22	UL924 Emergency Equipment
45523	EN-RPA23R120-347V	Relay Panel Enclosure	23	UL924 Emergency Equipment
45524 <sup>3</sup>	EN-RPA24R120-347V	Relay Panel Enclosure	24	UL924 Emergency Equipment
45525	EN-RPA0RNE120-347V	Relay Panel Enclosure	0	Not UL924 Emergency Rated
45526	EN-RPA1RNE120-347V	Relay Panel Enclosure	1	Not UL924 Emergency Rated
45527	EN-RPA2RNE120-347V	Relay Panel Enclosure	2	Not UL924 Emergency Rated
45528	EN-RPA3RNE120-347V	Relay Panel Enclosure	3	Not UL924 Emergency Rated
45529	EN-RPA4RNE120-347V	Relay Panel Enclosure	4	Not UL924 Emergency Rated
45530	EN-RPA5RNE120-347V	Relay Panel Enclosure	5	Not UL924 Emergency Rated
45531	EN-RPA6RNE120-347V	Relay Panel Enclosure	6	Not UL924 Emergency Rated
45532	EN-RPA7RNE120-347V	Relay Panel Enclosure	7	Not UL924 Emergency Rated
45533	EN-RPA8RNE120-347V	Relay Panel Enclosure	8	Not UL924 Emergency Rated
45534	EN-RPA9RNE120-347V	Relay Panel Enclosure	9	Not UL924 Emergency Rated
45535	EN-RPA10RNE120-347V	Relay Panel Enclosure	10	Not UL924 Emergency Rated
45536	EN-RPA11RNE120-347V	Relay Panel Enclosure	11	Not UL924 Emergency Rated
45537	EN-RPA12RNE120-347V	Relay Panel Enclosure	12	Not UL924 Emergency Rated
45538	EN-RPA13RNE120-347V	Relay Panel Enclosure	13	Not UL924 Emergency Rated
45539	EN-RPA14RNE120-347V	Relay Panel Enclosure	14	Not UL924 Emergency Rated
45540	EN-RPA15RNE120-347V	Relay Panel Enclosure	15	Not UL924 Emergency Rated
45541	EN-RPA16RNE120-347V	Relay Panel Enclosure	16	Not UL924 Emergency Rated
45542	EN-RPA17RNE120-347V	Relay Panel Enclosure	17	Not UL924 Emergency Rated
45543	EN-RPA18RNE120-347V	Relay Panel Enclosure	18	Not UL924 Emergency Rated
45544	EN-RPA19RNE120-347V	Relay Panel Enclosure	19	Not UL924 Emergency Rated
45545	EN-RPA20RNE120-347V	Relay Panel Enclosure	20	Not UL924 Emergency Rated
45546	EN-RPA21RNE120-347V	Relay Panel Enclosure	21	Not UL924 Emergency Rated
45547	EN-RPA22RNE120-347V	Relay Panel Enclosure	22	Not UL924 Emergency Rated
45548	EN-RPA23RNE120-347V	Relay Panel Enclosure	23	Not UL924 Emergency Rated
45549 <sup>3</sup>	EN-RPA24RNE120-347V	Relay Panel Enclosure	24	Not UL924 Emergency Rated

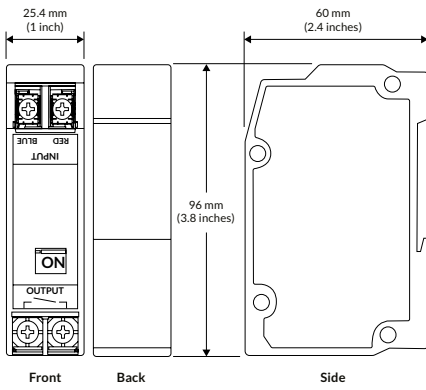
Footnotes:

<sup>2</sup> All relay panel assemblies come assembled with a relay panel enclosure, relay panel module, a transformer, and a relay(s) (except for NAED 45500 & 45525 which do not include relays).

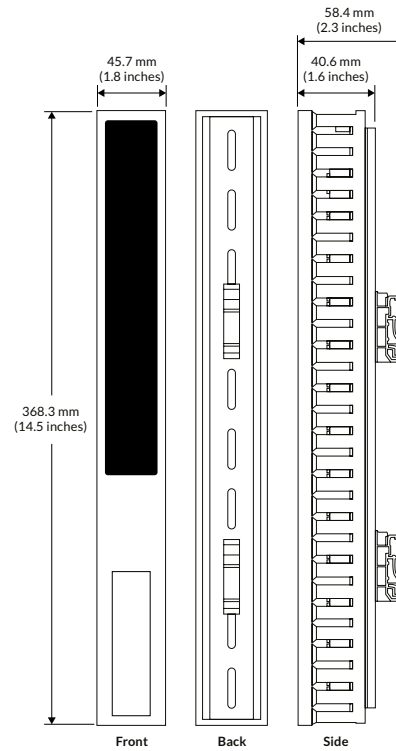
<sup>3</sup> Item Numbers 45524 and 45549 are replacing Item Numbers 45266 and 45267.

# Dimensions

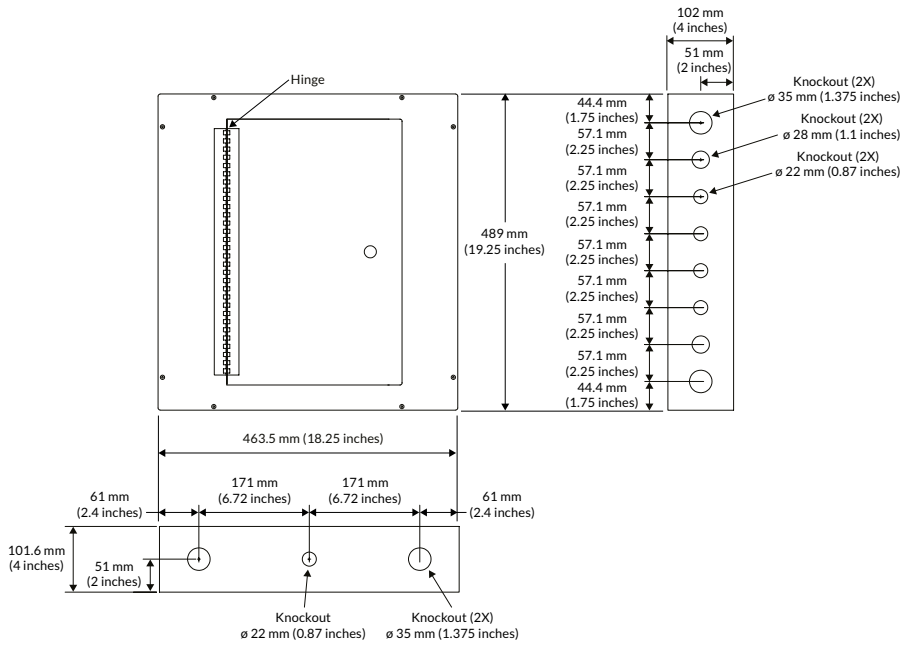
## Relay



## Relay Panel Module

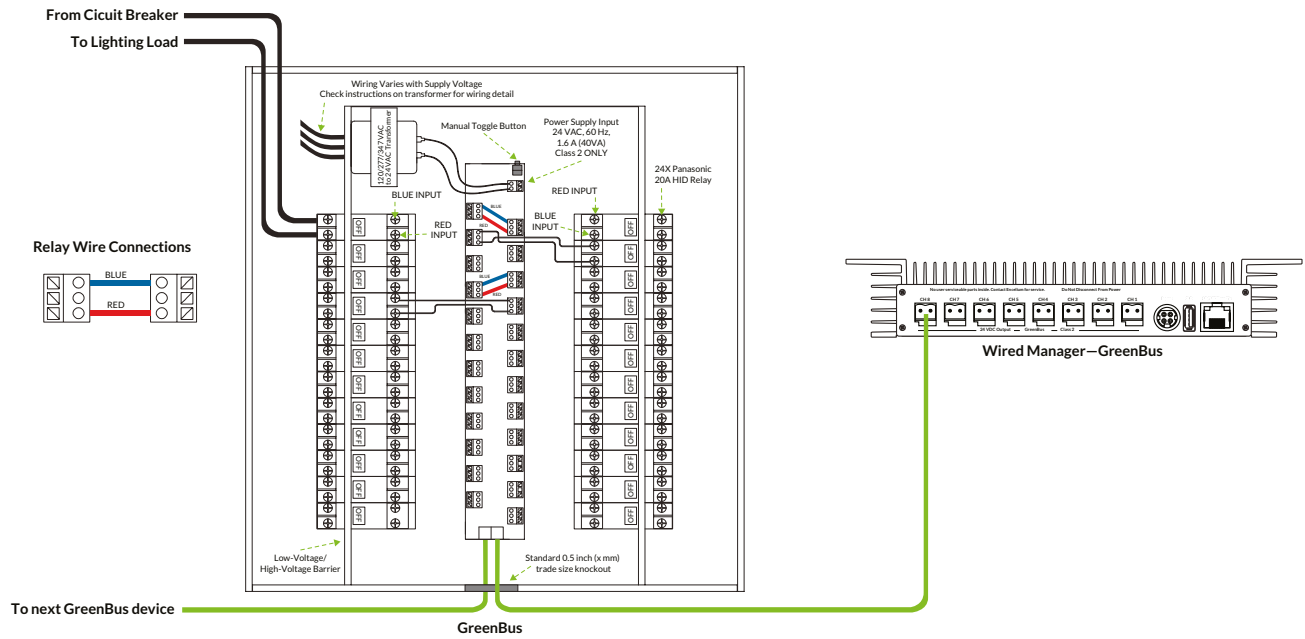


## Relay Panel Enclosure

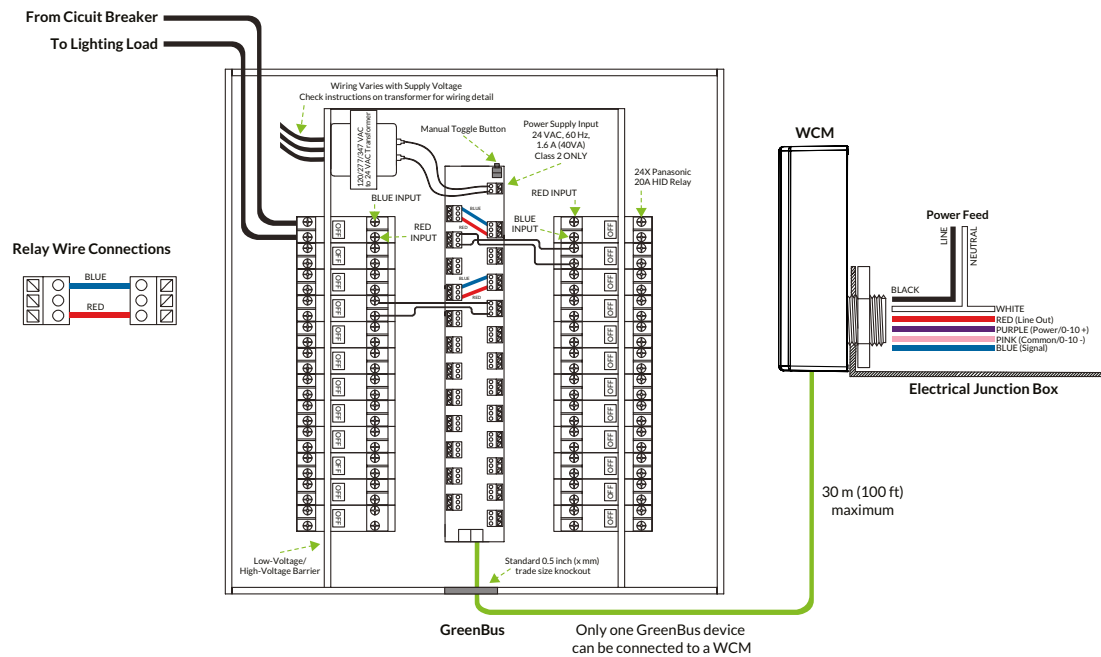


# Wiring Diagrams

## RPM to Wired Manager – GreenBus Wiring Diagram



## RPM Wireless System Integration Wiring Diagram



## Mounting Option

The Relay Panel Enclosure mounts directly to the wall using screws to secure it into place. Once the enclosure is securely in place, put the cover on the enclosure box and tighten all the screws.

