



# B Power and Auxiliary Relay Packs

Fully self-contained transformer and relay

Snaps in for easy installation

Zero Crossing for reliability and increased product life

UL 2043 Plenum Rated



Essential component for ceiling mounted occupancy sensor

PROJECT

LOCATION/TYPE

## Product Overview

### Description

Power packs provide 24VDC operating voltage to all Watt Stopper 24VDC occupancy sensors and LightSaver controllers. Auxiliary relay packs are similar to power packs but have no transformer power supply, only an isolated relay.

### Operation

Power packs consist of a transformer and high-current relay combined in one small, powerful package. The transformer has a primary high voltage input and a secondary, low voltage output (24 VDC, 114 mA with relay connected). The secondary voltage provides operating power to Watt Stopper sensors. When the occupancy sensors detect motion or light sensors detect inadequate ambient light, they electrically close an internal circuit which sends 24 VDC back to the power or auxiliary relay packs that control the lighting system.

### Plenum Rated

The B power packs are UL 2043 plenum rated with teflon coated low voltage leads and plenum rated plastic. This means that the power packs do not need to be installed in the junction box, but can be installed in the plenum. They are housed in ABS, UL-rated 94V-0 plastic enclosures.

### Applications

Watt Stopper power and auxiliary relay packs are designed to be flexible enough to control almost any lighting or HVAC load. For example, power packs can control lighting circuits, self-contained air conditioners, pumps, fans, motors, VAV systems, motorized damper controls and setback thermostats. They are excellent for any application which requires high voltage switching through low voltage controls. By linking power packs and sensors, an almost unlimited number of configurations can be obtained.

## Features

- Self-contained transformer relay system
- Available for 120, 220 to 240, 277 and 347 volt systems
- Capable of switching up to 20 Amps of electrical load (ballast)
- Installation in J-box not required
- Low voltage leads are teflon coated for use in plenum applications
- Can be used as a low voltage switch for other applications or as stand-alone low voltage switch
- 1/2 inch snap-in nipple attaches to standard electrical enclosures via 1/2 inch knockouts
- Zero crossing circuitry for reliability and increased product life (120, 277, 240 volt versions only)

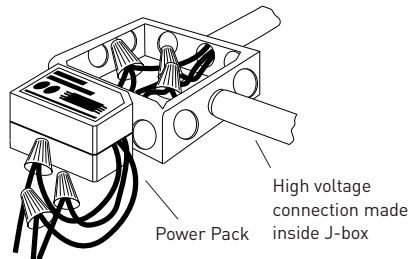


## Specifications

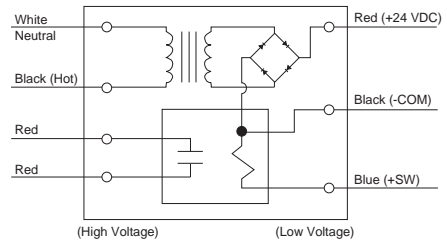
- Secondary voltage of 24 VDC
- Secondary output of 150 mA, 114 mA with relay connected
- Low voltage leads are rated for 300 volts
- UL-rated 94V-0 plastic enclosure
- UL 2043 plenum rated
- Dimensions: 1.6" x 2.75" x 1.6" (41mm x 70mm x 41mm) with a 1/2 inch snap-in nipple
- UL and CUL listed; Five year warranty

## System Layout

### Power Pack Installation

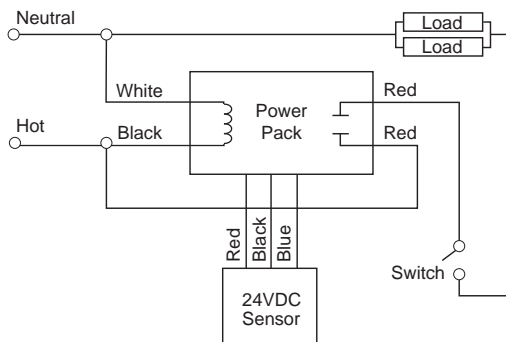


### Power Pack Schematic

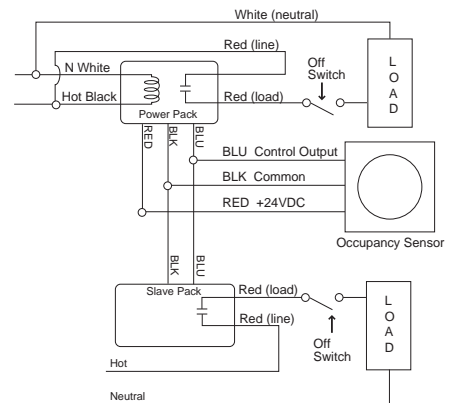


## Wiring Diagrams

### Power Pack with Ceiling Sensor



### Auxiliary Relay Pack with Sensor



## Ordering Information

Catalog No.	Description	Input Voltage	Load Ratings			Output
			Ballast(A)	Incan(A)	Motor(HP)	
<input type="checkbox"/> B120E-P*	Power Pack	120 VAC; 60 Hz	20	13	1	24 VDC; 150 mA**
<input type="checkbox"/> B277E-P*	Power Pack	277 VAC; 60 Hz	20	-	-	24 VDC; 150 mA**
<input type="checkbox"/> B230E-P*	Power Pack	220-240 VAC; 50-60 Hz	20	13	1	24 VDC; 150 mA**
<input type="checkbox"/> B347D-P	Power Pack	347 VAC; 60 Hz	15	-	-	24 VDC; 150 mA**
<input type="checkbox"/> S120/277/347E-P	Relay Pack	120/277/347 VAC; 60 Hz	20/20/15	13/-/-	1/-/-	

\* These power packs feature zero crossing  
 \*\*Output is 150 mA before relay is connected and 114 mA after relay is connected.  
 Power packs are white; auxiliary relay packs are black.

## Installation Notes

1. All Watt Stopper power packs should be installed in accordance with state, local, and national electrical codes and requirements.
2. Power packs are designed to attach to existing or new electrical enclosures with 1/2 inch knockouts. (Check electrical codes in your area.)
3. Most applications require UL listed, 18-22 AWG, 3-conductor, Class 2 cable for low voltage wiring. For plenum return ceilings use UL listed plenum-approved cables.