UNIVERSAL VOLTAGE POWER PACK

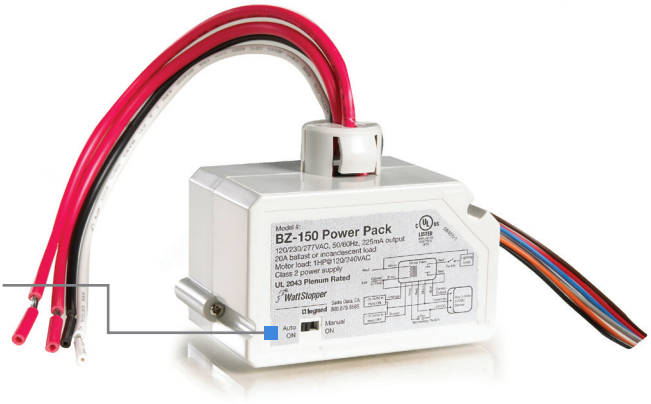
BZ-150

High-efficiency switching power supply

Zero crossing for reliability and increased product life

Auto-ON or Manual-ON operating mode

Plenum rated



Hold-on and hold-off inputs

Overcurrent protection (low-voltage)

120/277VAC, 50/60Hz

DESCRIPTION

The BZ-150 Universal Voltage Power Pack is full featured and can provide 24 VDC operating voltage to Wattstopper's low-voltage occupancy sensors. In addition, the BZ-150 enables manual-on, hold-on, hold-off and load shed applications when used with lighting control panels or building management systems. This device is constructed with environmentally friendly materials and is RoHS-compliant

OPERATION

The BZ-150 consists of a high-efficiency switching power supply and a high-current relay. It has an input of 120/277 VAC, 50/60Hz, and an output of 24VDC, 225mA. It turns the connected load on and off automatically based on occupancy sensor input, or manually with a low-voltage momentary switch. The dip switch setting allows the user to select Auto ON or Manual ON as the operating mode. Additional low-voltage inputs provide hold-on and hold-off features for broader applications.

MANUAL ON AND BI-LEVEL SWITCHING

Energy codes require automatic off. Some codes and EPAct require bi-level switching. The BZ-150 meets both of these requirements, while seamlessly integrating manual on for maximum energy savings. When used with a low-voltage wall switch, Auto ON and Manual ON can be selected while in the field by using the conveniently located dip switch on the front. Combining switches, power packs and sensors provides easy and cost-effective code-compliant solutions.

APPLICATIONS

The BZ-150 can control lighting circuits, self-contained air conditioners, pumps, fans, motors, VAV systems, motorized damper controls and setback thermostats. By using two low-voltage switches, a ceiling sensor and two BZ-150s (one set to Auto ON and one set to Manual ON) bi-level switching with manual-on operation can be achieved. The hold-on input is ideal for retail and commercial facilities that want to override an occupancy sensor and force lighting on during normal business hours. After hours, a time clock signals the BZ-150 to cancel the hold-on lighting mode, allowing the sensor to resume control. The hold-off input can be used for load shedding or security systems.

FEATURES

- Self-contained power supply relay system
- Efficient switching power supply providing optimized current output based on number of sensors
- LED indicates status of relay or if there is a low-voltage overcurrent
- Hold-on and hold-off inputs integrate with BMS, lighting control panels & other building systems
- Integrates with low-voltage momentary switch to control any 24VDC occupancy sensor
- The product meets the materials restrictions of RoHS
- Provides auto-on or manual-on field-selectable operating mode
- Zero crossing circuitry for reliability and increased product life
- UL 2043 plenum rated for cost-effective installation
- 1/2" snap-in nipple attaches to standard electrical enclosures through 1/2" knockouts
- 14 AWG wires on the relay for 20A operation
- BAA/BABA-compliant model available

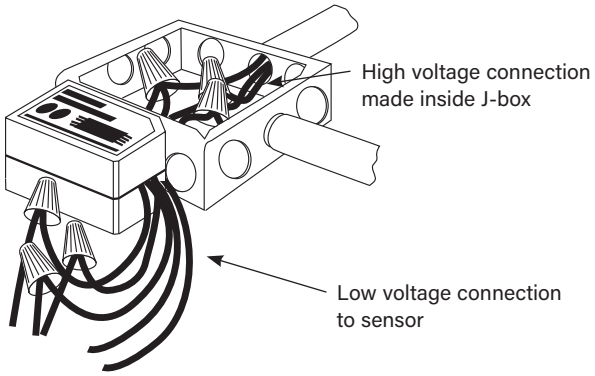
PROJECT		LOCATION/ TYPE	

SPECIFICATIONS

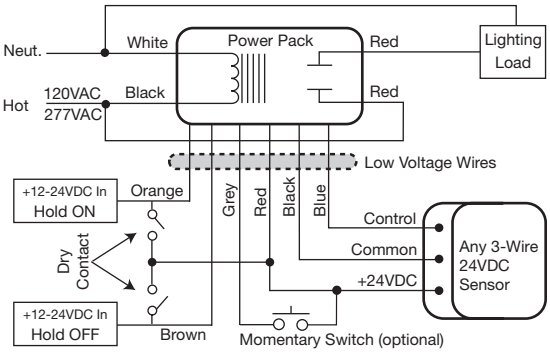
- 120/277VAC, 230/240V (single phase), 50/60Hz voltage input
- Load Requirements
  - Ballast, Incandescent: 20amp @120/277VAC
  - Eballast: 16amp @277VAC
  - Motor: 1HP @120/240VAC
- Output: 225mA @24VDC (with relay connected)
- Low-voltage leads are rated for 300 volts
- UL-rated 94 V-O gray plastic enclosure
- Dimensions: 1.6" x 2.75" x 1.6" (40.6mm x 69.9mm x 40.6mm) H x W x D with a 1/2" (12.7mm) snap-in nipple
- UL and cUL listed
- Five year warranty

INSTALLATION & WIRING

Installation Diagram

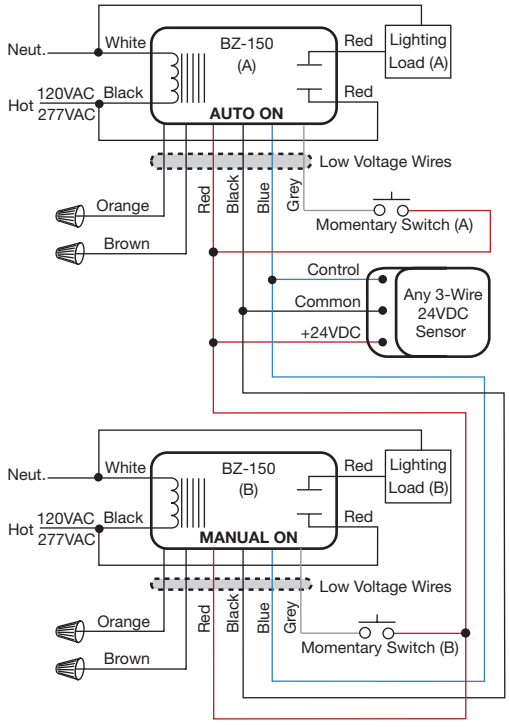


Wiring with Occupancy Sensor



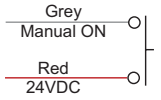
MANUAL-ON & BI-LEVEL SWITCHING

Installation Diagram

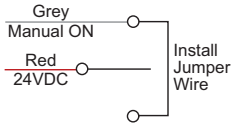


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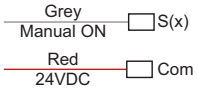
Low-voltage Momentary Switch Options



Two-wire Switch



Three-wire Switch

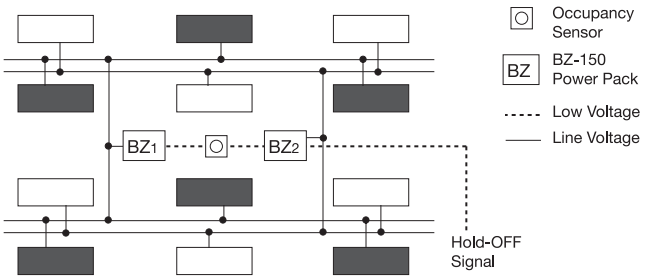


Multi-button Switch

Do not use pilot or locator light connects

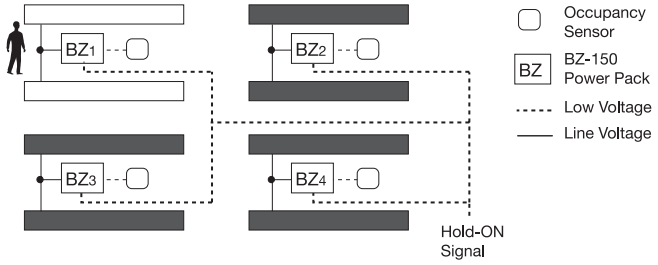
HOLD-OFF & HOLD-ON APPLICATIONS

Load Shed (Hold-off) Application for Open Office Spaces



The occupancy sensor connected to each BZ-150 keeps all lights on when the space is occupied. When the load shed command is given (by utility meter, BMS, etc.), lights connected to BZ2 are held off. Remaining lights (connected to BZ1) are still controlled by occupancy sensor.

Retail (Hold-on) Application



During store hours, a signal from a time clock to the BZ-150 holds lights on, regardless of occupancy. After hours, the clock schedule cancels the hold-on and occupancy sensor control takes over.

All Wattstopper power packs should be installed in accordance with state, local, and national electrical codes and requirements.

Power packs are designed to attach to existing or new electrical enclosures with .5" 125.40mmJ knockout (check electrical codes in your area).

Most applications require UL-listed, 18-22 AWG, 3-conductor, Class 2 cables for low-voltage wiring. For plenum return ceilings use UL-listed plenum-approved cables.

ORDERING INFORMATION

Catalog #		Input Voltage	Load Ratings			Output
			Ballast (A)	Incan (A)	Motor (HP)	
☐	BZ-150	120/277VAC; 50/60Hz	20	20	1*	24 VDC; 225 mA**
☐	BZ-150-U					

*1 Hp rated at 120/250 VAC. **Output is 225 mA with relay connected.
-U = Product is compliant with Buy American Act and Build America, Buy America Act

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