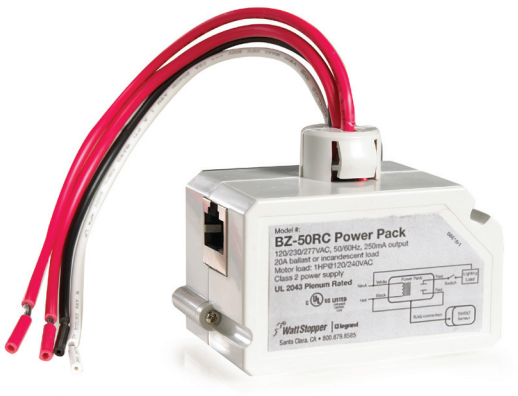
UNIVERSAL VOLTAGE POWER PACK

BZ-50RC

High-efficiency switching power supply

RJ45 connection

Zero crossing for reliability and increased product life



Overcurrent protection (low-voltage

Hold ON and Hold OFF inputs

Plenum rated

Description

The BZ-50RC Universal Voltage Power Pack provides 24 VDC operating voltage to Wattstopper's low-voltage stand alone (non-digital) occupancy sensors equipped with RJ45 jacks. This device is constructed with environmentally friendly materials and is RoHS-compliant.

Operation

The BZ-50RC 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 switches line voltage in response to the signal coming from the occupancy sensor. The BZ-50RC can be attached to existing junction boxes or mounted into fixture wiring trays.

Plenum Rated

The BZ-50RC Power Pack is comprised of Teflon-coated low-voltage leads and an ABS, UL 2043 and 94V-0 plastic resin enclosure that is plenum-rated. As a result, the BZ-50RC does not require installation into the junction box, but can be cost-effectively installed directly into a lighting fixture.

Applications

The BZ-50RC Power Pack is designed to be flexible enough to control almost any lighting or HVAC load, such as lighting circuits, self-contained air conditioners, pumps, fans, motors, VAV systems, motorized damper controls and setback thermostats. The BZ-50RC is well-suited 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.

Note: The RJ45 jack is designed for connection only to low votage, non-digital sensors (not for use with Wattstopper's DLM sensors). FS-Cx cables are available for connection with sensors.

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
- 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
- Easy RJ45 connection
- The product meets the materials restrictions of RoHS

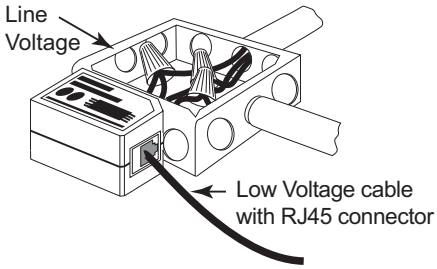
PROJECT		LOCATION/ TYPE	

Specifications

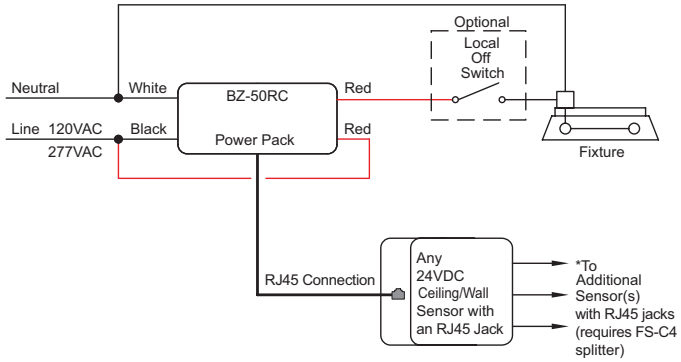
- 120/277VAC, 230/240V (single phase), 50/60Hz voltage input
- Load Requirements
  - Ballast, Incandescent: 20amp @120/277VAC
  - Eballast: 16amp @277VAC
  - Motor: 1HP @120/240VAC
- Output: 225mA @24VDC (with relay connected)
- Connection:
  BZ-50RC with RJ45 connections
- UL-rated 94 V-0 grey plastic 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 and Wiring

Installation Diagram



Wiring with Occupancy Sensor



Ordering Information

			Load Ratings			
Catalog #		Description	Ballast(A)	Incan(A)	Motor(HP)	Output
☐	BZ-50RC	Universal Power Pack with RJ45 connection	20	20	1*	24 VDC; RJ45 connection**
☐	FS-C1	10' cable with shielded RJ45 male connectors at each end				
☐	FS-C2	6" cable with 3 flying leads at one end and a shielded RJ45 male connector on the other				
☐	FS-C3	3' cable with shielded 90º male RJ45 on one end and a shielded straight male RJ45 at the other				
☐	FS-C4	Shielded RJ45 splitter with female to dual female receptacles				
☐	FS-C5	Shielded RJ45 male to male coupler				

*1 Hp rated at 120/250 VAC. **Output is 225 mA with relay connected.

1. All Wattstopper 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 .5" 125.40mmJ knockout (check electrical codes in your area).
3. 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.

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