## Greengate <br> SP15 \& SP20, Heavy Duty Switchpacks



- Replaces separate transformers and relays
- Zero-crossing circuit provides increased durability, especially with today's high inrush loads
- Capable of switching up to 20 Amps
- Suitable for Plenum use
- Rated for Ballast, Tungsten and Motor Loads


## Specifications:

Electrical Ratings:
Input: (120/277 VAC-SP20-MV), (347 VAC-SP15-347), (220-240 VAC-SP20-240), $50 / 60 \mathrm{~Hz}$ operation. Contacts are isolated and may be used to control low voltage circuits.
Output: 15 VDC 125 mA to operate up to five Greengate sensors
Control: Connecting the 22 AWG red and blue control leads to each other will close the relay contacts Ballast Compatibility: Compatible with magnetic and electronic ballasts
NOTE: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with the CFL and ballast manufacturer to determine effects of cycling.
Operating Environment:

- Temperature: $32^{\circ} \mathrm{F}$ to $104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.$ to $\left.40^{\circ} \mathrm{C}\right)$
- Relative humidity: less than $95 \%$, non-condensing
- For indoor use only

Housing: Medium impact injection molded housing. ABS resin complies with UL $94 \mathrm{~V}-0$. Plenum rated for external junction box mounting, with Teflon coated leads.
Motor Load: 1 HP 120-240 VAC; 2 HP 250 VAC
Size: 2 15/16" $\times 2$ 7/16" $\times 1$ 11/16"
Mounting: Mounts to the side of a 4" square box via 1/2" knockout

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| ---: | ---: | ---: |
| Catalog \# | Type |  |
| Project |  |  |
| Comments | Date |  |



## Overview

Switchpacks provide 15 VDC operating voltage to all low voltage, 15 VDC occupancy sensors and daylighting controllers. A single switchpack can provide power for up to five sensors. Up to ten switchpacks can be connected to one sensor for control of multiple circuits. Isolated contacts may also be used to control HVAC, contactors, motors, etc.

## Description/Operation

The switchpack has two main components: a transformer and one high current relay. The transformer has a primary line voltage input and a secondary low voltage output. The low voltage output, 15 VDC, provides operating power to connected low voltage Greengate occupancy sensors. When an occupancy sensor detects motion, it electrically closes an internal circuit, pulling up the control signal between the sensor and the switchpack. This signals the switchpack to close its high current relay, turning the connected load on.

## Application

The switchpack is designed to work with low voltage sensors which require switchpacks. It cannot be used with sensors designed for use with any other low voltage relay systems. Consult sensor spec sheets for other sensor relay combinations.

## Ordering

| Catalog \# | Ratings | Ballast | Tungsten | Motor (HP) | Output |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SP20-MV | $120 / 277$ VAC, $50 / 60 \mathrm{~Hz}$ | 20 A | $15 \mathrm{~A}, 120 \mathrm{~V}$ | $1 \mathrm{HP}-120 \mathrm{~V}, 2 \mathrm{HP}-250 \mathrm{~V}$ | $15 \mathrm{VDC}, 125 \mathrm{~mA}$ |
| $\mathrm{SP} 15-347$ | $347 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ | 15 A | NR | NR | $15 \mathrm{VDC}, 125 \mathrm{~mA}$ |
| SP20-240 | $220-240 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ | 20 A | NR | NR | $15 \mathrm{VDC}, 125 \mathrm{~mA}$ |

A/B Switching


Three Way Switching


Standard Configuration


2 Circuits, 1 Sensor


## Mounting



All connections are made via pigtails with twist-on wire connectors.

NOTE: Connect either the orange or black supply lead to the power source, depending upon the power requirements. Cap the unused lead.

