

**OVERVIEW**

The SBGR 10 Series sensor provides motion based control of an outdoor or wet location luminaire. The SBGR 10 utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. With the optional integrated photocell, additional energy savings can be achieved during daytime periods when there is sufficient daylight.

The SBGR 10 sensor embeds into a 2.65" (6.73 cm) square opening in an outdoor or wet location fixture. It is recommended for 8-15 ft (2.44-4.57 m) mounting and provides a 360° coverage area radius for walking motion of greater than 2x the mounting height.

**FEATURES**

- 100% Digital PIR Detection, Excellent RF Immunity
- Self-Contained Relay
- IP65 Rated for Outdoor Applications
- Self-Contained Relay, No Power Pack Needed
- No Minimum Load Requirements
- Compatible w/ LEDs, Electronic & Magnetic Ballasts, CFLs, & Incandescents
- Interchangeable Hot & Load Wires- Impossible to Wire Backwards
- Push-Button Programmable
- Adjustable Time Delays
- Optional 0-10 VDC Dimming Output
- Non-Volatile Settings Memory
- Convenient Test Mode

**Warranty**

Five-year limited warranty. Complete warranty terms located at:  
[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application.  
 Specifications subject to change without notice.



*SBGR 10  
 SBGR 10 OEX*

*Low Mount 360° Sensor*



**ORDERING INFORMATION**

SBGR 10		Example: SBGR 10 OEX P HVOLT BK			
Series	PIR Detection Type	Dimming/Photocell	Voltage	Color	Min Dimm Setting <sup>2</sup>
SBGR 10 Low Mount 360° Sensor	[blank] Indoor PIR OEX Outdoor PIR	[blank] None D Occ. controlled high/low dimming P Photocell ADC <sup>1</sup> Automatic dimming photocell	[blank] 120-277VAC (MVOLT) HVOLT 347-480VAC	WH White BK Black	0V Off 3V 3 VDC 1V 1 VDC 4V 4 VDC 2V 2 VDC 5V 5 VDC

Notes:

1. ADC option (Dimming & Photocell together) is not available with OEX option, see SBGR 6 ODP datasheet for alternate solution.
2. Required for D option.

## SPECIFICATIONS

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### Electrical

<b>Input Ratings</b>	120-277V, 80 mA, 50/60Hz 347V, 50 mA, 50/60Hz 480V, 60 mA, 50/60Hz
<b>Output Ratings</b>	120V, 800W/6.67A - Tungsten, Standard Ballast, Electronic Ballast 277V, 1385W/5A - Tungsten 277V, 1200VA/4.3A - Standard Ballast, Electronic Ballast 347V, 1500VA/4.3A - Standard Ballast 480V, 2400VA/5A - Standard Ballast 120V, 1/2HP - Motor
<b>Relay Type</b>	Latching
<b>Low Voltage Output Ratings</b>	0-10VDC, Sinks <20mA (With Dimming Options; D/ADC/ODP)
<b>Class Rating</b>	0-10V Dimming can be wired Class 1 or 2
<b>Standards/ Ratings</b>	Energy Management Equipment, UL916 (E167435)

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### Mechanical

<b>Dimensions</b>	3.40"H x 3.40"W x 1.40"D (86mm x 86mm x 36mm)
<b>Mounting</b>	Recessed
<b>Connection Type</b>	Line-Voltage Leads

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### Environmental

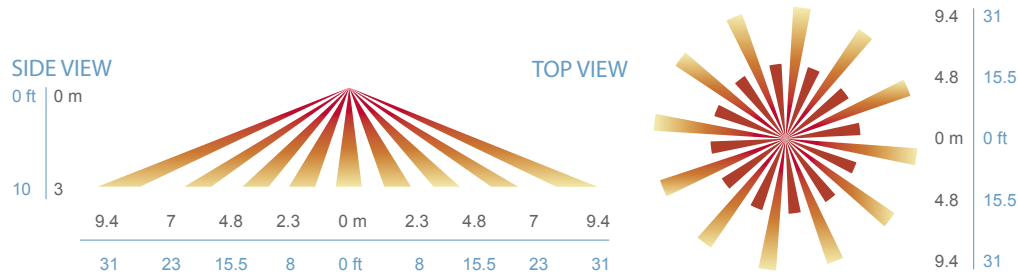
<b>Relative Humidity</b>	Up to 90%, Non-Condensing
<b>Environment</b>	Indoor/Outdoor
<b>Standards/ Ratings</b>	IP66 (IEC60529) when mounted in an IP66 enclosure, RoHS

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## COVERAGE PATTERN

### LOW MOUNT 360° LENS

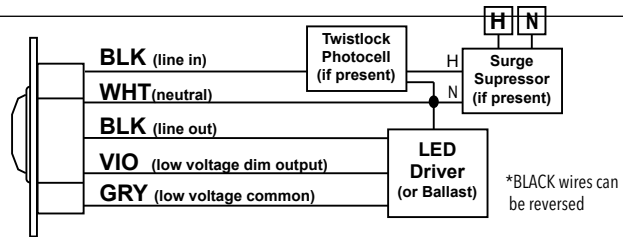
The **SBGR 10** is recommended for 8-15 ft (2.44-4.57 m) mounting and provides a coverage area radius for walking motion of greater than 2x the mounting height. When mounted 10 ft (3.05m) high, the sensor's coverage for walking motion extends out 30 ft (9.14 m) in a 360° pattern. When embedded in a pole mounted fixture, for example, in a parking lot or along a path, the sensor provides 270° of coverage (90° is blocked by the pole). When walking across beams, detection will occur earlier than if walking directly into beams.



## WIRING (DO NOT WIRE HOT)

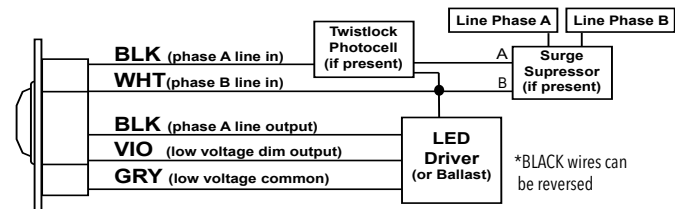
### WIRING TO SINGLE PHASE POWER (120/277/347 VAC)

- BLACK\*** - 120/277 VAC Input  
(**RED** wire for 347 VAC - requires HVOLT option)
- BLACK\*** - Switched Line Voltage Output to Luminaire  
(**RED** wire for 347 VAC - requires HVOLT option)
- WHITE** - Neutral
- VIOLET** - Low Voltage Dimming Output (0-10 VDC)
- GRAY** - Low Voltage Common



### WIRING TO 2-PHASE POWER (208/240/480 VAC)\*

- BLACK\*** - 208/240 VAC Phase A Input  
(**RED** wire for 480 VAC - requires HVOLT option)
- BLACK\*** - Switched Line Voltage Output to Luminaire  
(**RED** wire for 480 VAC - requires HVOLT option)
- WHITE** - Phase B of 208/240/480 VAC Input
- VIOLET** - Low Voltage Dimming Output (0-10 VDC)
- GRAY** - Low Voltage Common



\*Safety Note: only one line phase is being switched

## INSTALLATION

- The SBGR Series offers a custom look for recess mounting in lighting fixtures. It mounts inside a 2.65" (6.7 cm) square opening in a fixture (minimum depth 1.50" (3.8 cm)). A #6 screw with a max head height of .130 inches is recommended.
- A label kit is included to mask off half of the sensor's coverage pattern for end of aisle, or trim the side viewing to create a rectangular pattern for center of aisle.

