



Emergency Driver for Hazardous Location Fixtures  
 10 Watts Output Power  
 Class 2 Output  
 Type HL for Hazardous Luminaires

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

**Product order number:** BSL310HAZSB  
 BSL10B9UBK55SBZ11 (w/o sled)

**12NC number:** 913702478701  
 913702488901

### Specifications

**UL Component Recognized for US and Canada**  
 Factory Installation Only (Indoor and Damp)  
 Output Class 2 Compliant  
 Input Title 20 CEC Compliant

**Illumination Time**  
 90 Minutes

**Full Warranty**  
 5 Years (NOT pro-rata)

**Universal Input Voltage**  
 120-277 VAC, 50/60 Hz

**AC Input Power Rating**  
 4.0 W (Maximum)

**Output Voltage**  
 15-50 VDC

**Output Power**  
 10.4 W (Maximum)

**Test Switch/Charging Indicator Light**  
 Two-Wire Illuminated Test Switch  
 (2W-ITS is IP67 rated and is a Class 2 device)

**Battery**  
 High-Temperature, Maintenance-Free  
 Nickel-Cadmium Battery  
 7 to 10-Year Life Expectancy

**Recharge Time**  
 24 Hours

**Temperature Rating (Ambient)**  
 0-55°C (32-131°F)

**Dimensions**  
 Electronics Enclosure - 6.5" x 2.2" x 1.2"  
 (165 mm x 56 mm x 30 mm)  
 Battery - 8.7" x 2.2" x 1.2"  
 (221 mm x 56 mm x 30 mm)

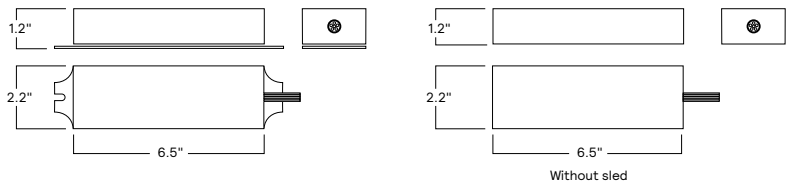
**Weight**  
 3.6 lbs (1.63 kg)

### Benefits:

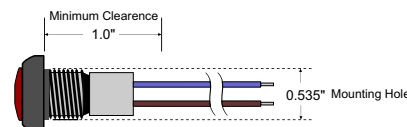
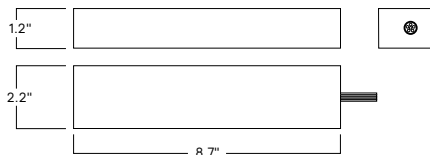
- Type UL HL approved for use in Class I, Division 2 hazardous location luminaires
- Smart Charger Technology for low energy consumption
- Meets Title 20 CEC (California Energy Commission) efficiency standards
- Class 2 Output - UL 1310 Certified, CSA 22.2 No 223-M91 compliant
- Emergency mode lumen output of up to 1300 lumens
- Universal input (120-277 VAC)
- Two-wire input reduces wiring errors
- Compatible with AC drivers and LED loads rated for Class 2
- RoHS Compliant

### Dimensions

Electronics Enclosure - 6.5" x 2.2" x 1.2"



Battery - 8.7" x 2.2" x 1.2"



BSL310HAZSB (with and without electronics sled) ships with an IP67 2-wire illuminated test switch/charging indicator light.

# BSL310HAZSB

## Emergency LED Driver for Hazardous Location Luminaires

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### Application

The BSL310HAZSB universal input (120-277 V) emergency LED driver works in conjunction with an AC LED driver that has an output current not to exceed 3.0 A. The emergency driver consists of a high-temperature nickel-cadmium battery, charger and electronic circuitry in one case. The BSL310HAZSB can deliver up to 10.4 watts to an LED load (measured at nominal battery voltage) for 90 minutes. If used in an emergency-only fixture, no AC driver is necessary. The BSL310HAZSB is **UL Component Recognized for factory installation only** and is suitable for use in Class I, Division 2 type fixtures. It is suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. These fixtures should be tested by the fixture manufacturer in accordance to the standards pertaining to Class I, Division 2 applications. For more information about specific LED and AC driver compatibility, please contact Technical Support.

### Operation

When AC power fails, the BSL310HAZSB immediately switches to the emergency mode, operating the LEDs at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency driver automatically returns to the charging mode.

### Installation

The BSL310HAZSB does not affect normal fixture operation and may be used with either a switched or unswitched fixture. If a switched fixture is used, an unswitched hot lead must be connected to the emergency driver. The emergency driver must be fed from the same branch circuit as the AC driver. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C. The product is suitable for installation in sealed and gasketed fixtures.

### Emergency Illumination

The BSL310HAZSB operates an LED load of up to 10.4 W at nominal battery voltage for a minimum of 90 minutes.

### Specification

Emergency lighting shall be provided by using a LED fixture equipped with a Bodine BSL310HAZSB universal input (120-277 V) emergency driver. This emergency driver shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one case. An illuminated test switch (ITS) to monitor charger and battery and installation hardware shall be provided. The emergency driver shall be capable of delivering up to 10.4 watts to an LED load for a minimum of 90 minutes. The BSL310HAZSB is suitable for indoor and damp locations and for sealed & gasketed fixtures. It shall be suitable for use in Class I, Division 2 type fixtures. The BSL310HAZSB shall have a maximum of 4.0 watts of input power and a 24.0 Watt-hour battery capacity and shall comply with emergency standards set forth by the current NEC. This device complies with Part 15 of the FCC Rules and meets Title 20 CEC (California Energy Commission) efficiency standards. The emergency driver shall be UL Recognized for factory installation only.

### Warranty

The BSL310HAZSB is warranted for five (5) full years from date of manufacture (NOT pro-rata). Please see detailed warranty information on our website.

### Bodine Product Storage Guidance

1. All batteries require periodic charging and discharging cycles. In general, here are the relevant battery chemistry industry standard guidelines to maintain optimal battery capacity for each battery type used by Bodine:

- a. Nickel-based battery chemistries (Ni-Cd/Ni-MH) should be charged and discharged within 6 months. At a minimum, the battery should be recharged within this time.
- b. Lead-Acid battery chemistries, such as the Sealed Lead-Acid (SLA) batteries used in some Bodine products, should be fully recharged every 8 months.
- c. Lithium chemistries should be fully recharged every 6 months. Though they can be stored for longer periods and still maintain their full effectiveness, they will not be able to provide the product with emergency power until they are recharged.

2. Any battery stored for the time period mentioned above requires a full charge or for the product to be energized for its rated charge time in order to meet the full rated emergency run-time.

3. Batteries must be stored at temperatures between 0-40°C. However, optimal storage is 0-25°C. Storage at extreme temperatures will reduce the storage time possible and may permanently damage the battery.

Never store the product with the inverter connector (sometimes also called the "converter" or "unit enable" connector) closed. This enables the output and the control circuitry and will drain the battery in storage at a faster rate.

