



Emergency driver for LED luminaires  
with extended temperature range  
Class 2 Output  
Separate Battery Configuration

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

**Product order number:**  
BSL8SB

**12NC number:**  
913702469801

### Specifications

#### Regulatory Certifications

UL Listed to UL 924 and tested to CSA 22.2 No. 141  
Factory or Field Installation (Indoor and Damp)  
Output Class 2 Compliant  
Input Title 20 CEC Compliant

#### Illumination Time

90 Minutes

#### Full Warranty

3 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

8 W (Constant)

#### Test Switch/Charging Indicator Light

IP67 rated 2W-ITS (can be used in wet locations)  
Minimum Clearance 1.00" (25.4 mm)  
Mounting Hole 0.54" (13.6 mm)

#### Battery

High-Temperature, Maintenance-Free  
Sealed Lead Acid Battery  
7.00" x 1.38" x 2.36" (178 mm x 35 mm x 60 mm)  
Terminal Height 2.60" (66 mm)

#### Recharge Time

24 Hours

#### Temperature Rating (Ambient)

-20°C to +55°C (-4°F to 131°F)

#### Dimensions (Enclosure Excluding Battery)

6.57" x 2.25" x 1.18" (167 mm x 57 mm x 30 mm)  
Mounting Center 6.0" (152.4 mm)

#### Weight

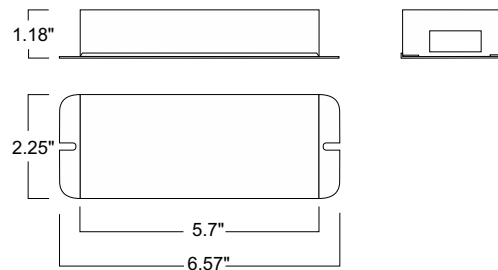
3.35 lbs (1.52 kg)

### Benefits

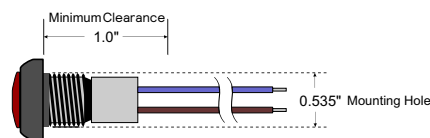
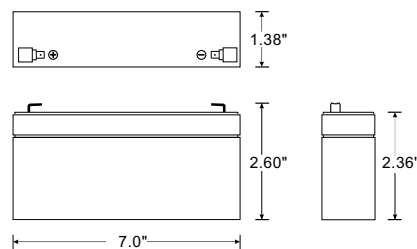
- Smart Charger Technology for low energy consumption
- Meets Title 20 CEC (California Energy Commission) efficiency standards
- Class 2 output - UL 1310 Certified, CSA 22.2 No 223-M91 compliant
- Emergency mode lumen output of up to 1000 lumens
- Universal input (120 through 277 VAC)
- 2 wire input helps reduce wiring errors
- Compatible with a variety of LED strip manufacturers

### Dimensions

#### Enclosure



#### Battery



IP67 rated test switch



# BSL8SB

## Emergency LED Driver with Extended Temperature Range

### Application

The BSL8SB 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 sealed lead acid battery, charger and electronic circuitry in one case. The BSL8SB delivers 8 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 BSL8SB is suitable for indoor and damp locations. Warning: Risk of personal injury or property damage – This emergency battery system contains a sealed lead acid battery. When used in a sealed and gasketed luminaire the luminaire must incorporate some type of venting method. For more information about specific LED and AC driver compatibility, please call the factory. For more information about specific LED and AC driver compatibility, please contact Technical Support.

### Operation

When AC power fails, the BSL8SB 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 BSL8SB 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 -20° C. The product is suitable for installation in sealed and gasketed fixtures when provided with some type of venting method.

### Code Compliance

For detailed information regarding standards and code compliance for emergency lighting see product page or the Codes and Standards section on the web site.

### Emergency Illumination

The BSL8SB operates an LED load at 8 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 BSL8SB universal input (120–277 V) emergency driver. This emergency driver shall consist of a high-temperature, maintenance-free sealed lead acid battery, charger and electronic circuitry contained in one case. An IP67 rated test switch to monitor charger and battery as well as installation hardware shall be provided. The emergency driver shall be capable of delivering 8 watts to an LED load for a minimum of 90 minutes. The BSL8SB is suitable for indoor and damp locations. The BSL8SB shall have a maximum of 4.0 watts of input power and a 12.0 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 CEC Title 20 (California Energy Commission) efficiency standards. The emergency driver shall be UL Listed for factory or field installation.

### Warranty

The BSL8SB is warranted for three (3) 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.

