

# ELI™ SERIES EMERGENCY LIGHTING INVERTERS

ELI-100-SD, ELI-250-SD

# PHILIPS bodine

A Division Of Philips Electronics North America Corporation

**Self-diagnostic operation;  
120/277 VAC, 60 Hz mini inverter;  
90-minute runtime**

## Product Summary

### UL Listed

Field Installation

### Illumination Time

90 Minutes

### Maximum Load Power

ELI-100-SD: 100W

ELI-250-SD: 250W

### Full Warranty

Unit - 3 Years Full Coverage

Battery - 3 Years, Plus 7 Years Additional Pro-Rata

### Input Voltage/Output Voltage

120/277 VAC, 60 Hz

### AC Input Power Rating

ELI-100-SD: 120 Watts

ELI-250-SD: 315 Watts

### Test Switch

Momentary

### Battery

Maintenance-Free Sealed Lead Calcium

### Recharge Time

24 Hours

### Charging Indicator Light

LED

### Temperature Rating (Ambient)

68° F to 86° F

(20° C to 30° C)

### Dimensions

ELI-100-SD

18-5/8" x 9-5/8" x 4-3/8"

(473 mm x 244 mm x 111 mm)

ELI-250-SD

18-5/8" x 10-1/8" x 8-1/4"

(473 mm x 257 mm x 210 mm)

### Weight

ELI-100-SD

37 lbs. (16.78 kg)

ELI-250-SD

89 lbs. (40.37 kg)

### Special Features

Self-Diagnostic Operation

Fused Output Load Connections



## APPLICATION

The Philips Bodine ELI-100-SD and ELI-250-SD Self-Diagnostic Emergency Lighting Mini Inverters work in conjunction with a fluorescent or incandescent fixture to create an emergency lighting system.\* The ELI-100-SD operates a maximum load of 100 W. The ELI-250-SD supports a maximum load of 250 W. They allow the connected fixture(s) to be on, off, switched or dimmed without affecting emergency operation. Each unit consists of a sealed lead calcium battery, charger and electronic circuitry in one steel case. ELI-100-SD and ELI-250-SD provide power to the input side of the fixture, including the ballast, and can be used with indoor or outdoor emergency fixture applications.

## OPERATION

Upon failure of normal power, the ELI-100-SD and ELI-250-SD instantly begin providing emergency power to the connected lighting load for a minimum of 90 minutes. They will support lumen output at 91% of the lamp's rating throughout the 90-minute duration. A solid-state low voltage disconnect circuit protects the inverter battery from severe damage by deep discharge during prolonged power failures. When normal power is restored, the automatic, temperature-compensated, variable-rate float charger begins recharging the battery. The battery capacity is fully restored in 24 hours. A brownout sensing circuit ensures proper operation during low line conditions.

The ELI-100-SD and ELI-250-SD feature self-diagnostic circuitry. This circuitry checks different operating parameters during initial start-up, normal standby and diagnostic stages. If a fault is detected, the fault indicator flashes to alert maintenance personnel.

ELI SD units automatically initiate a 15-minute diagnostic cycle every 25 to 30 days to test emergency operation. The self-diagnostic circuitry does not utilize the lighting load (i.e., the emergency lamps) to cycle and test the unit battery. Instead, a built-in resistive load is used, thereby eliminating emergency lamp illumination during diagnostic testing and saving lamp life.

## INSTALLATION

The ELI-100-SD and ELI-250-SD do not affect normal fixture operation and may be used with a switched or unswitched fixture. They are designed for surface mounting and may be installed up to 1000 feet from the emergency fixture.

## UL AND CODE COMPLIANCE

The ELI-100-SD and ELI-250-SD have been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and are UL Listed for field installation. Emergency illumination exceeds the National Electrical Code (NEC) and Life Safety Code (NFPA-LSC) requirements.

\* The ELI-100-SD and ELI-250-SD mini inverters have a square wave output in emergency mode that may not be compatible with some ballasts or drivers. Please check with your ballast/driver manufacturers to ensure their products are compatible with a square wave input.

## Specifiers Reference

Project \_\_\_\_\_ Type \_\_\_\_\_ Model No. \_\_\_\_\_

Comments \_\_\_\_\_

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# ELI™ SERIES EMERGENCY LIGHTING INVERTERS

ELI-100-SD, ELI-250-SD

## EMERGENCY ILLUMINATION

The ELI-100-SD supports 100 W of emergency illumination for a minimum of 90 minutes. ELI-250-SD provides 250 W. ELI SD mini inverter units will support lumen output at 91% of the lamp rating throughout the 90-minute emergency illumination period.

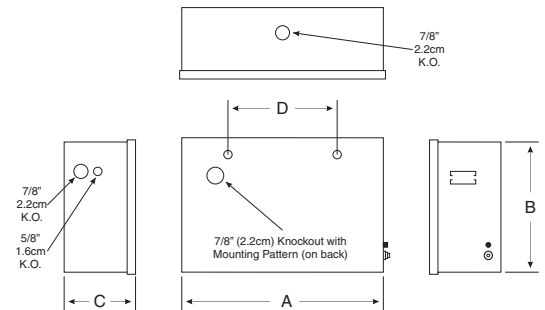
## SPECIFICATION

Emergency lighting shall be provided by using emergency fixtures equipped with a Philips Bodine ELI-100-SD (100 W) or ELI-250-SD (250 W) mini inverter. Electronic circuitry shall be self-diagnostic in design and automatically test emergency operation for 15 minutes every 25 to 30 days. Each unit consists of sealed calcium battery, charger and electronic circuitry contained in one 18-5/8" x 9-5/8" x 4-3/8" (ELI-100-SD) or 18-5/8" x 10-1/8" x 8-1/4" (ELI-250-SD) metal case. Solid-state indicator lights signal operational status. The mini inverter units shall be capable of powering incandescent or fluorescent lighting fixtures at not less than 91% of nominal lumen rating for a minimum 90 minutes regardless of local switch position. The ELI-100-SD shall support up to 100 W; the ELI-250-SD shall support up to 250 W. They shall allow the connected fixture(s) to be on, off, switched or dimmed without affecting emergency operation. The mini inverter units shall exceed emergency standards set forth by the current NEC. They shall be UL Listed for installation remote from the fixture and shall be warranted for a full three years from date of purchase.

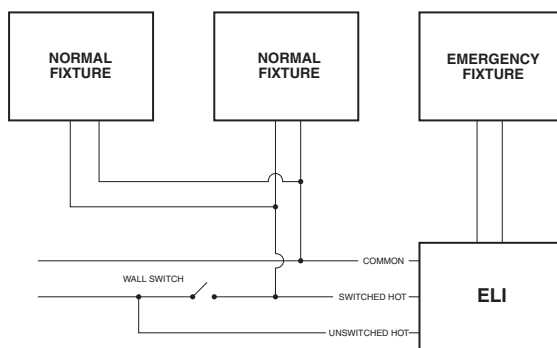
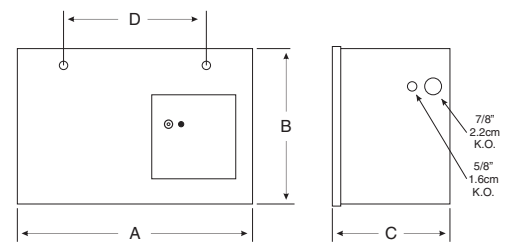
## WARRANTY

Models ELI-100-SD and ELI250-SD are warranted for three (3) years from the date of purchase. This warranty covers only properly installed Philips Bodine emergency mini inverters used under normal conditions. For the warranty period, Philips Emergency Lighting will, at its option, repair or replace without charge a defective inverter, provided it is returned to the factory transportation prepaid and our inspection determines it to be defective under terms of the warranty. Repair or replacement, as stated above, shall constitute the purchaser's exclusive warranty, which does not extend to transportation, installation, labor or any other charges; nor does it apply to any equipment of another manufacturer used in conjunction with the inverter.

### Model ELI-100-SD



### Model ELI-250-SD



| Model      | A       | B       | C      | D       |
|------------|---------|---------|--------|---------|
| ELI-100-SD | 18 5/8" | 9 5/8"  | 4 3/8" | 14 1/2" |
|            | 47.3cm  | 24.4cm  | 11.1cm | 36.8cm  |
| ELI-250-SD | 18 5/8" | 10 1/8" | 8 1/4" | 13"     |
|            | 47.3cm  | 25.7cm  | 21.0cm | 33.0cm  |

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For the most current technical information and notices, please visit TechNotes on our website.