

**PHILIPS**  
**bodine**

Emergency Backup

Inverter

ELI-S-100



Project: \_\_\_\_\_  
Type: \_\_\_\_\_  
Model No: \_\_\_\_\_ Qty: \_\_\_\_\_  
Date: \_\_\_\_\_  
Notes: \_\_\_\_\_

**Sinusoidal (Sine Wave) Output**  
**Dimming Output Voltage**  
**100 Watts Power Maximum**

Product order number ELIS100120 (120V model)  
ELIS100277 (277V model)

### Specifications

#### UL Listed for US and Canada

Listed to UL924 and tested to CSA 22.2, No. 141  
For Field Installation (Indoor and Damp)

#### Maximum Emergency Load Power

(including AC ballast/driver)  
100 W

#### Warranty

5 Years Full Coverage (not including battery)  
3 Year Battery warranty, plus 7 years  
additional pro-rating

#### Illumination Time

90 Minutes

#### ELI-S-100-120V

##### AC Input Voltage

120 VAC, 60 Hz  
AC Input Current  
370 mA Max Charging  
ing

##### Output Voltage

120 VAC, 60 Hz

#### ELI-S-100-277V

##### AC Input Voltage

277 VAC, 60 Hz  
AC Input Current  
160 mA Max Charg-

##### Output Voltage

277 VAC, 60 Hz

#### ELI-S-100-120V / ELI-S-100-277V

#### AC Input Power Rating

45 W Max Charging

#### Charging Indicator Light/Test Switch

Integrated LED/test switch

#### Battery

Maintenance-Free Sealed Lead Acid Battery

#### Recharge Time

24 Hours

#### Temperature Rating (Ambient)

32° F to 104° F (0° C to 40° C)

#### Dimensions

12.562" x 9.812" x 4.675"  
(319 mm x 249 mm x 119 mm)

#### Weight

25 lbs. With Batteries installed

#### Special Features

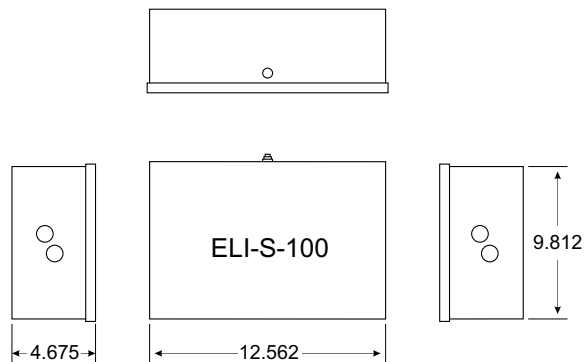
Fused Output Load Connections

### Benefits:

- Sine wave output
- Dimming output voltage
- Fused output load connections
- Works with LED and fluorescent fixtures
- Ideal for (but not limited to) screw-base LED lamps
- Compatible with AC (line voltage) driven TLED lamps
- Remote-mounting up to 250 feet maximum

### Dimensions

12.6" x 9.8" x 4.7" (319 mm x 249 mm x 119 mm)



# ELI-S-100

## Backup Inverter – 100W sinusoidal output with dimming capability

### APPLICATION

The Philips Bodine ELI-S-100 Emergency Lighting Inverter works in conjunction with a fluorescent or LED fixture to create an emergency lighting system. The ELI-S-100 operates a maximum load of 100 W at unity power factor. It allows the connected fixture(s) to be on, off, switched or dimmed without affecting emergency operation. Each unit consists of two sealed lead acid batteries, charger and electronic circuitry in one steel case. The ELI-S-100 provides power to the input side of the fixture, including AC ballast/driver, and can be used with indoor or outdoor emergency fixture applications. The ELI-S-100 is not suitable for use with HID sources.

### OPERATION

Upon failure of normal power, the ELI-S-100 instantly begins providing emergency power to the connected lighting load for a minimum of 90 minutes. 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 ELI-S-100 automatically returns to charge mode. The battery capacity is fully restored in 24 hours. Isolated dry-contact relays (2 each) are also provided to override local dimming controls used in normal mode, when luminaires are driven from AC power mains.

### DIMMING

The ELI-S-100 features a dimming control output of 0-10 volts. This dimming capability allows a higher power fixture to operate at a dimmed 100 W maximum emergency-mode lighting level - or, alternately, it allows a string of multiple fixtures to be driven in emergency mode at a combined 100 W maximum. For example, four 100W LED fixtures may be connected to one ELI-S-100 and dimmed for emergency operation to 20% of normal power, with each LED fixture supplying 20W of output power (20W x 4 = 80W).\* The emergency mode output dimming voltage is field settable in 5 steps to provide nominally 20%, 40%, 60%, 80%, or 100% light output. The installer will set the dimming level by operating the dip switches which are located at the lower center section of the circuit board. See illustrations.

**\*Note: Dimming drivers are less efficient at reduced power. This inefficiency must be accounted for in the design.**

### INSTALLATION

The ELI-S-100 does not affect normal fixture operation and may be used with a switched or unswitched fixture. It can be installed in close proximity to the fixture or remote from the fixture (up to 250 feet).

### EMERGENCY ILLUMINATION

The ELI-S-100 supports emergency illumination for a minimum of 90 minutes. At a maximum of 100 W the ELI-S-100 will provide input power to ballasted lamp supporting 100% of the AC rated output throughout the 90-minute emergency illumination period.

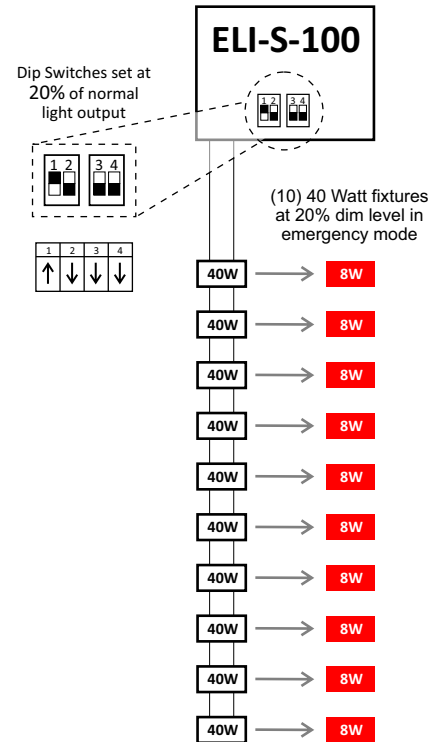
### SPECIFICATION

Emergency lighting shall be provided by using a standard fixture equipped with a Philips Bodine ELI-S-100. Each unit consists of two maintenance free sealed lead acid batteries, charger and electronic circuitry contained in one 12.562" x 9.812" x 4.675" metal case. The ELI-S-100 unit shall be capable of powering any fluorescent or LED lighting fixture rated at a maximum of 100 W at 0°C to 40°C for a minimum 90 minutes regardless of local switch position. The ELI-S-100 shall allow the connected fixture(s) to be on, off, switched or dimmed without affecting emergency operation. The ELI-S-100 unit shall exceed emergency standards set forth by the current NEC and CEC. It shall be UL Listed and CSA certified, and suitable for damp locations.

### WARRANTY

The ELI-S-100 is warranted for five (5) years from the date of manufacture. This warranty excludes the batteries, which have a warranty of three (3) years with an additional seven (7) year pro-rated warranty. This warranty covers only properly installed Philips Bodine ELI-S-100 emergency units 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 on inspection will be conducted to determine if the unit is defective under the 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.

### General example of dimming operation:



Note: dimming drivers are less efficient at reduced power. This inefficiency must be accounted for in the design.

### Dimming level switch settings:

