

PHILIPS
bodine

Emergency Backup

Inverter

ELI-S-100



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
Field or Factory Installation (Indoor and Damp)
Output Class 2 Compliant

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

ELI-S-100-277V

AC Input Voltage

277 VAC, 60 Hz
AC Input Current
160 mA Max Charging

Output Voltage

120 VAC, 60 Hz

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

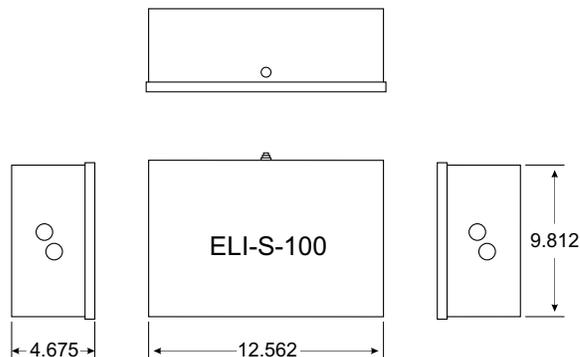
Fused Output Load Connections

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.

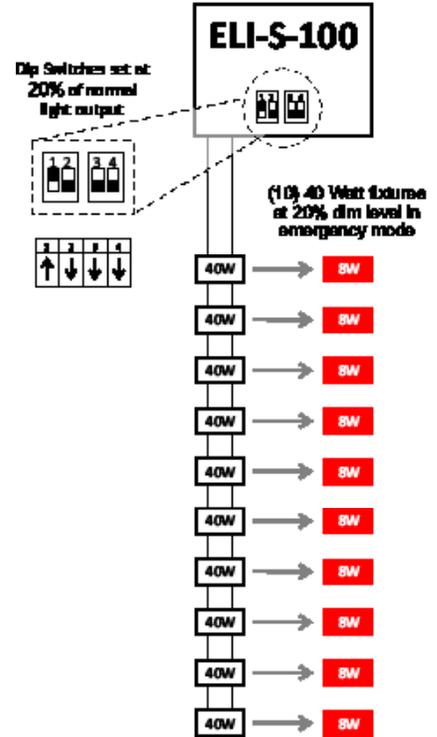
SPECIFICATION

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 (Pending) for factory or field installation.

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:

