

# B90

## Fluorescent Emergency Ballast

**PHILIPS**  
**bodine**

A Division Of Philips Electronics North America Corporation

**One-lamp emergency illumination;  
End-of-lamp-life compatible**

### Product Summary

#### UL LISTED

Factory or Field Installation

#### Illumination Time

90 Minutes

#### Initial Light Output

500 - 600 Lumens

#### Full Warranty

1 Year (NOT pro-rata)

#### Dual Input Voltage

120/277 VAC, 60 Hz

#### AC Input Current

280 mA

#### AC Input Power Rating

3.5 Watts

#### Test Switch

Single Pole

#### Battery

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

#### Battery Charging Current

280 mA

#### Recharge Time

24 Hours

#### Charging Indicator Light

LED

#### Temperature Rating (Ambient)

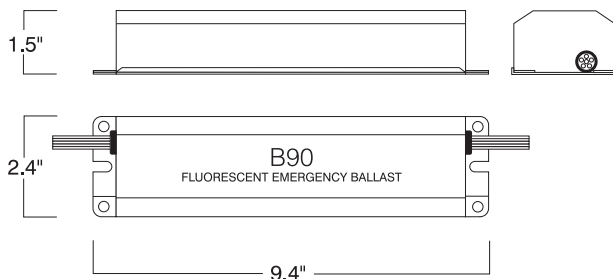
0°C to +55°C  
(32°F to 131°F)

#### Dimensions

9.4" x 2.4" x 1.5"  
(238 mm x 60 mm x 38 mm)  
Mounting Center 8.9" (226 mm)

#### Weight

2.5 lbs. (1.13kg)



### APPLICATION

The B90 fluorescent emergency ballast works in conjunction with an AC ballast to convert new or existing fluorescent fixtures into emergency lighting. The emergency ballast consists of a high-temperature nickel-cadmium battery, charger and electronic circuitry in one compact red case. The B90 can be used with one 17 - 40 W (2' - 4') T8, T10 or T12 fluorescent lamp without an integral starter, including U-shaped, HO, VHO, circline and energy-saving, or (4-pin) compact. It is also compatible with most one-, two-, three- and four-lamp electronic, standard, energy-saving and dimming AC ballasts. If used in an emergency-only fixture, no AC ballast is necessary. The B90 is suitable for indoor locations. It is not suitable for air handling heated air outlets or wet, damp or hazardous locations. For information about specific lamp and ballast compatibility, please call the factory.

### OPERATION

When AC power fails, the B90 immediately switches to the emergency mode, operating one lamp at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency ballast automatically returns to the charging mode and, using a patented circuit, delays AC ballast operation for approximately three seconds to prevent false tripping of the AC ballast end-of-lamp-life shutdown circuits.

### INSTALLATION

The B90 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 ballast. The emergency ballast must be fed from the same branch circuit as the AC ballast. The B90 may be installed inside, on top of or remote from the fixture. The emergency ballast may be remotely installed up to half the distance the AC ballast manufacturer recommends removing the AC ballast from the lamp or up to 50 feet, whichever is less. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C.

### UL AND CODE COMPLIANCE

The B90 has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and is UL Listed for factory or field installation. Emergency illumination time exceeds the National Electrical Code (NEC), Life Safety Code (NFPA-LSC) and UL 90-minute requirements.

*Emergency ballasts can be modified to accommodate special voltages, frequencies and longer run times.*

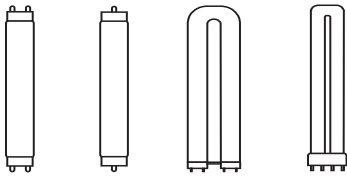
*CSA Certified model also available.*

### Specifiers Reference

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

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### EMERGENCY ILLUMINATION

Depending on the wattage and type of lamp selected, the B90 produces 500 to 600 lumens initial emergency light output. During emergency operation, one lamp is illuminated, even if installed with a multi-lamp AC ballast. Emergency lumen output will be less with a compact fluorescent lamp.

### SPECIFICATION

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with a Philips Bodine B90 emergency ballast. This emergency ballast shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one 9 3/8" x 2 3/8" x 1 1/2" red metal case. A solid-state charging indicator light to monitor the charger and battery, a single-pole test switch and installation hardware shall be provided. The emergency ballast, using a patented circuit, shall delay AC ballast operation for approximately three seconds to prevent false tripping of AC ballast end-of-lamp-life shutdown circuits. The emergency ballast shall be capable of operating one 17 - 40 W (2' - 4') T8, T10 or T12 or (4-pin) compact at reduced illumination in the emergency mode for a minimum of 90 minutes. It shall be suitable for indoor locations. The B90 shall have 3.5 Watts of input power and a 14.4 Watt-hour battery capacity and shall comply with emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed for installation inside, on top of or remote from the fixture and shall be warranted for a full year from date of purchase.

### WARRANTY

Model B90 is warranted for one (1) full year from date of purchase. This warranty covers only properly installed Philips Bodine emergency ballasts used under normal conditions. For the warranty period, Philips Emergency Lighting will, at its option, repair or replace without charge a defective emergency ballast, 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 emergency ballast.

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