# Two-hour emergency illumination; End-of-lamp-life compatible

# PHILIPS **bodine**

A Division Of Philips Electronics North America Corporation

# **Product Summary**

UL LISTED Factory or Field Installation

Illumination Time 90 Minutes (Standard) 120 minutes (One 17-32 W T8, One 20-40 W T10 or T12)

Initial Light Output 600 - 700 Lumens

Full Warranty 3 Years (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

Ballast 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. (1.13 kg)

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

CSA Certified model also available.

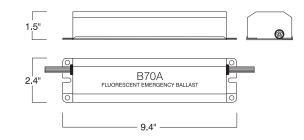
## Specifiers Reference

Project

Comments \_

\_\_\_\_Туре \_\_

Model No.



# APPLICATION

The B70A 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 B70A can be used with most 17 - 215 W (2' - 8') T8, T10 or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline and energy-saving, and (4-pin) long compacts. 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 B70A is suitable for indoor locations. It is not suitable for air handling heated air outlets or wet, damp or hazard-ous locations. For information about specific lamp and ballast compatibility, please call the factory.

## **OPERATION**

When AC power fails, the B70A immediately switches to the emergency mode, operating one lamp at a reduced lumen output for a minimum of 90 minutes. Two-hour duration may be selected with one 17 - 32 W T8 or one 20 - 40 W T10 or T12 fluorescent lamp. 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 3 seconds to prevent false tripping of the AC ballast end-of-lamp-life shutdown circuits.

# INSTALLATION

The B70A 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 B70A 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 remoting 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 B70A 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.

# L2000070

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## **EMERGENCY ILLUMINATION**

Depending on the wattage and type of lamp selected, the B70A produces 600 to 700 lumens initial emergency light output. During emergency illumination, 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 B70A emergency ballast. This emergency ballast shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one  $9.3/8" \times 2.3/8"$  $\times 1.1/2"$  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 3 seconds to prevent false tripping of AC ballast end-of-lamp-life shutdown circuits. The emergency ballast shall be capable of operating one 17 - 215 W (2' - 8') T8, T10 or T12 or (4-pin) long compact at reduced illumination in the emergency mode for a minimum of 90 minutes or one 17 - 32 W T8 or one 17 - 40 W T10 or T12 at reduced illumination in the emergency mode for a minimum of 120 minutes. It shall be suitable for indoor locations. The B70A 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 three years from date of purchase.

#### WARRANTY

Model B70A is warranted for three (3) full years 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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