



4-Hour Emergency Operation  
Universal Input (120 through 277)  
End-of-Lamp-Life Compatible

Project: \_\_\_\_\_  
Location: \_\_\_\_\_  
Cat.No: \_\_\_\_\_  
Type: \_\_\_\_\_  
Qty: \_\_\_\_\_  
Notes: \_\_\_\_\_

**Product order number:**  
B54U

**12NC number:**  
913710892502

## Specifications

**Illumination Time**  
Four Hours

**Initial Light Output**  
225-450 Lumens

**Full Warranty**  
5 Years (NOT pro-rata)

**Universal Input Voltage**  
120-277 VAC, 50 or 60 Hz

**AC Input Current**  
280 mA

**AC Input Power Rating**  
4.0 Watts

**Test Switch**  
Single Pole

**Charging Indicator Light**  
LED

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

**Recharge Time**  
24 Hours

**Temperature Rating (Ambient)**  
0-55°C (32-131°F)

**Dimensions**  
13.3" x 2.4" x 1.5" (338 mm x 60 mm x 38 mm)  
Mounting Center 12.8" (325 mm)

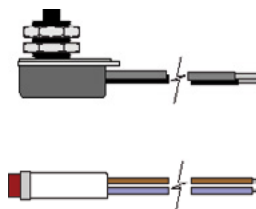
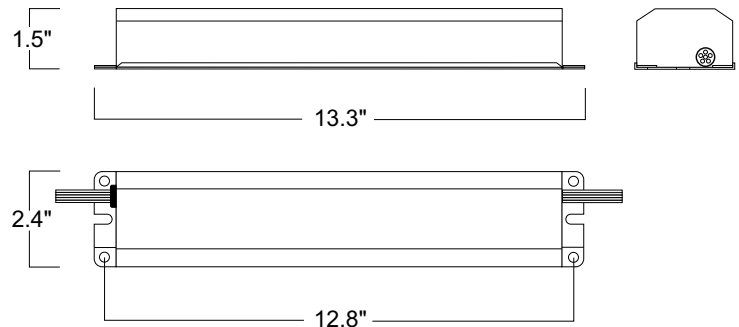
**Weight**  
3.4 lbs (1.5 kg)

## Benefits

- Extended 4-hour emergency illumination
- Universal input (120 through 277 VAC 50/60 Hz)
- End-of-Lamp-Life Compatible
- Painted metal enclosure

## Dimensions

13.3" x 2.4" x 1.5" (mounting center - 12.8")



A test switch and charging indicator light are provided.

# B54U

## Emergency Ballast, 4-hour Run-Time

### Application

The B54U emergency ballast works in conjunction with an AC ballast to convert new or existing fluorescent fixtures into emergency lighting. The emergency ballast handles a wide range of input voltages and frequencies and consists of a high-temperature nickel-cadmium battery, charger and electronic circuitry in one compact red case. The B54U can be used with most 16-40 W (2'-4') T8, T9, T10 or T12 (including T12 HO) lamps, 18 - 28 W (4-pin) twin, quad and triple twin-tubes and 18 - 39 W rapid-start long compact lamps. 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 B54U is suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. It is not suitable for air handling heated air outlets or wet or hazardous locations. For information about specific lamp and ballast compatibility, please contact Technical Support. Recommended applications include: hospitals, nursing homes, health care facilities and high rise buildings whose occupants need longer egress illumination times to exit the building.

### Operation

When AC power fails, the B54U Universal Input immediately switches to the emergency mode, operating one lamp at a reduced lumen output for a minimum of 4 hours. When the 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 B54U 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 B54U 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.

### Emergency Illumination

Depending on the wattage and type of lamp selected, the B54U produces 225 to 450 lumens initial emergency light output (see Table 1). During emergency operation, one lamp is illuminated, even if installed with a multi-lamp ballast.

### Specification

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with a Bodine B54U emergency ballast. This emergency ballast shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one 13 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 16-40 W (2' -4') T8, T9, T10 or T12; one 18-28 W, (4-pin) twin, quad or triple twin-tube; or one 18 - 39 W rapid-start long compact at \_\_\_\_\_lumens (See Table 1) initial light output in the emergency mode for a minimum of four hours. It shall be suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. The B54U shall have 4 Watts of input power and a 24 Watt-hour battery capacity and shall exceed emergency standards set forth by the current NEC. The emergency ballast shall be suitable for installation inside, on top of or remote from the fixture and shall be warranted for a full five years from date of purchase.

### Warranty

Model B54U is warranted for five (5) full years from date of purchase. Please see detailed warranty information on our web site.

Table 1 Initial Lumen Output

| LAMP           | LUMENS |
|----------------|--------|
| F32T8          | 425    |
| F40T12         | 225    |
| F39BX, PL-L36W | 450    |

