



Emergency Ballasts

Linear Fluorescent

BHD65U



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

## Hazardous Locations One- or Two-Lamp Illumination Universal Input (120 through 277)

Product order number: BHD65UCR (galvanized metal case)

### Specifications

#### UL COMPONENT RECOGNIZED

Factory Installation Only  
(Damp)

#### Illumination Time

90 Minutes (Standard)  
120 Minutes (One 32 W T8)

#### Initial Light Output

300 - 700 Lumens

#### Full Warranty

3 Years (NOT pro-rata)

#### Universal Input Voltage

120 Through 277 VAC, 50 or 60 Hz

#### AC Input Current

75 mA

#### AC Input Power Rating

6.0 Watts

#### Test Switch

Double 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 +50°C (32°F to 122°F)

#### Dimensions

9.4" x 2.6" x 1.5"  
(238 mm x 67 mm x 38 mm)  
Mounting Center 8.9" (226 mm)

#### Weight

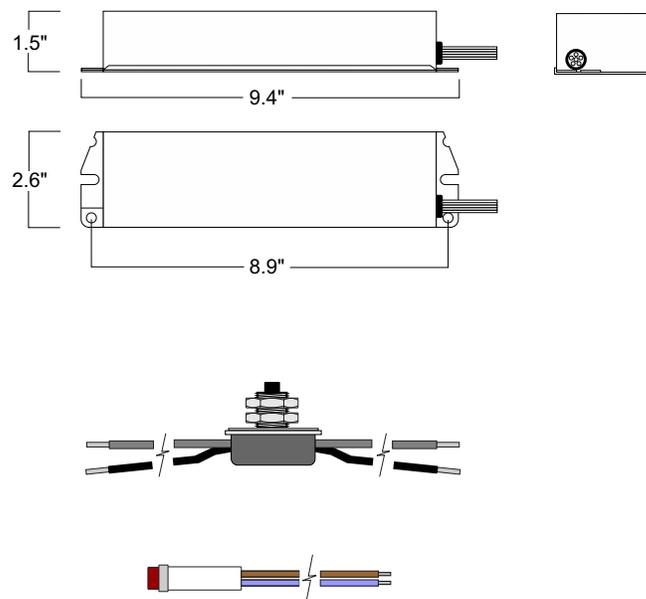
3.4 lbs. (1.5 kg)

### Benefits:

- For Class I, Division 2 Fixtures
- Universal input (120 through 277 VAC, 50/60 Hz)
- One or Two-lamp operation

### Dimensions

9.4" x 2.6" x 1.5" (mounting center - 8.9")



A test switch and charging indicator light is provided.



# BHD65U

## Flourescent Emergency Ballast, Hazardous Locations

**Table 1** Lamp Compatibility

LAMP DIAMETER	BASE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)
1", 1 1/4", 1 1/2" T8, T9, T10, T12	Single or Bipin	25 - 40 W (2'-4')	1
		17 - 40 W (2'-4')	2
		40 - 215 W (5'-8')	1

**Table 2** Initial Lumen Output

LAMP	LUMENS	
	1 Lamp	2 Lamps
F032, FB031 T8	575	625
F025, FB024 T8	450	575
F017, FB016 T8	375	550
F096 T8	700	
F40T12, F40/U	350	375
F40T12/ES (34 W)	350	375
F96T12 HO, VHO	575	

### APPLICATION

The BHD65U Universal Input emergency ballast works in conjunction with an AC ballast to convert 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, hermetically sealed relays and electronic circuitry in one compact red case. The BHD65U can be used with most 17 - 215 W (2' - 8') T8, T9, T10 or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline and energy-saving. It is also compatible with most 120 through 277 VAC (50 or 60 Hz) 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 BHD65U is **UL Component Recognized for factory installation only** and is suitable for use in Class I, Division II type fixtures. It is suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. These fixtures should be tested by the fixture manufacturer in accordance to the standards pertaining to Class I, Division II applications. This unit is not suitable for air handling heated air outlets. For information about specific lamp and ballast compatibility, please call the factory. Recommended applications include: hazardous locations; line voltages from 120 - 277 VAC (50 or 60 Hz); drilling rigs where generators are the primary source of power; and other applications requiring higher tolerance of line voltage variation or harmonic distortion.

### OPERATION

When AC power fails, the BHD65U immediately switches to the emergency mode, operating either one or two lamps at a reduced lumen output for a minimum of 90 minutes. Two-hour duration may be selected with one 32 W T8 fluorescent lamp. When AC power is restored, the BHD65U automatically returns to the charging mode.

### INSTALLATION

The BHD65U 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. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C. Please note: Test switch supplied is not rated for hazardous locations.

### EMERGENCY ILLUMINATION

Depending on the number (one or two), wattage and type of lamps selected, the BHD65U produces 300 to 625 lumens initial emergency light output (see Table 2). If two-lamp operation is selected, light output is evenly divided between the lamps for better distribution of emergency illumination.

### SPECIFICATION

Emergency lighting shall be provided by using a hazardous location fluorescent fixture equipped with a Philips Bodine BHD65U Universal Input fluorescent emergency ballast. This emergency ballast shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger, hermetically sealed relays and electronic circuitry contained in one 9 3/8" x 2 5/8" x 1 1/2" metal case. A solid-state charging indicator light to monitor the charger and battery, a double-pole test switch and installation hardware shall be provided. The emergency ballast shall be capable of operating [one or two] \_\_\_\_\_ fluorescent lamp(s) at \_\_\_\_\_ lumens (see Table 2) initial light output in the emergency mode for a minimum of 90 minutes or one 32 W T8 fluorescent lamp at reduced illumination in the emergency mode for a minimum of 120 minutes. The BHD65U shall be suitable for use in Class I, Division II type fixtures. It shall be suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. The BHD65U shall have 6 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 Component Recognized for factory installation with a hazardous location fixture.

### WARRANTY

Model BHD65U is warranted for three (3) full years from date of purchase. Please see detailed warranty information on our web site..

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