



Hazardous Location Luminaires
One or Two-Lamp Illumination
Universal Input (120 through 277)

Project: _____
Location: _____
Cat.No: _____
Type: _____
Qty: _____
Notes: _____

Product order number:
BHD65UCR

12NC number:
913702492501

Specifications

UL Component Recognized to UL 924
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
120-277 VAC, 50 or 60 Hz

AC Input Current
75 mA

AC Input Power Rating
6.0 Watts

Test Switch
Double 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)
0-50°C (32-122°F)

Dimensions
9.4" x 2.6" x 1.5" (239 mm x 67 mm x 38 mm)
Mounting Center 8.9" (226 mm)

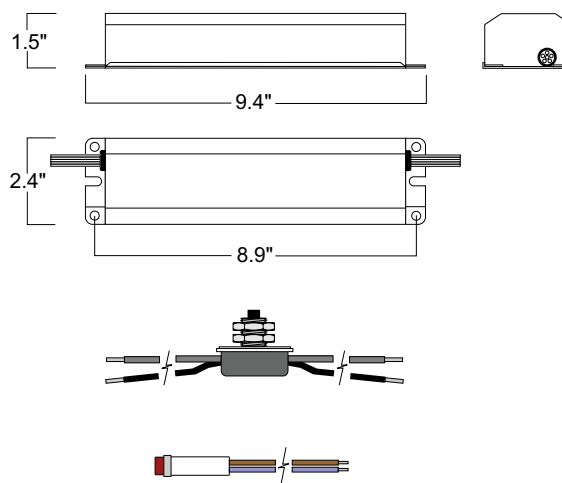
Weight
3.4 lbs (1.5 kg)

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 separate test switch and charging indicator light are provided.

BHD65U

Emergency Ballast, Hazardous Location Luminaires

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 2 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 2 applications. This unit is not suitable for air handling heated air outlets. For information about specific lamp and ballast compatibility, please contact Technical Support. 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. 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 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 2 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.

Table 1 Lamp Compatibility

LAMP DIAMETER	BASE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)
1", 1¼", 1½" 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	

