

BHD65U

Fluorescent Emergency Ballast

PHILIPS
bodine

A Division Of Philips Electronics North America Corporation

One- or two-lamp emergency illumination for hazardous location fixtures; Universal input voltage: 120 through 277 VAC, 50 or 60 Hz

Product Summary

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)

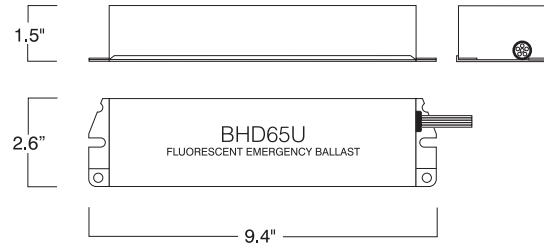
0°C to +50°C
(32°F to 122°F)

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)



APPLICATION

The BHD65U Universal Input fluorescent 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 13 - 215 W (2' - 8') T8, T9, T10 or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline and energy-saving, and (4-pin) twin, quad, triple twin-tube and long compacts (see Table 1). 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.*

UL and CODE COMPLIANCE

The BHD65U has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and is UL Component Recognized for factory installation only. Emergency illumination time exceeds the National Electrical Code (NEC), Life Safety Code (NFPA-LSC) and UL 90-minute requirements.

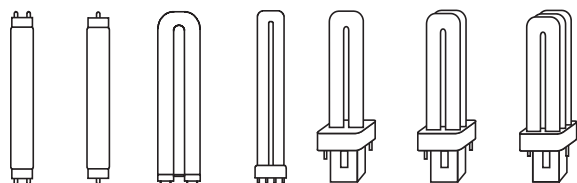
Replaces models B65, B65U and BHD650.

Specifiers Reference

Project _____ Type _____ Model No. _____
Comments _____

L2000018

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EMERGENCY ILLUMINATION

Depending on the number (one or two), wattage and type of lamps selected, the BHD65U produces 300 to 700 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" red 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 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 Component Recognized for factory installation with a hazardous location fixture and warranted for a full three years from date of purchase.

WARRANTY

Model BHD65U 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.

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
Long Compact	4-pin (2G11)	18 - 39 W	1
Compact (Twin, Quad, Triple-Twin)	4-pin (G24q, GX24q)	18 - 42 W	1
		13 - 26 W	2

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	
PL-L 40 W, F40/30BX, DULUX L 40 W	625	
PL-L 36 W, F39/36BX, DULUX L 36 W,	525	
PL-L 24 W, F27/24BX/RSBX, DULUX L 24 W	375	475
PL-L 18 W, F18BX, Dulux L 18 W		375
PL-T 42 W/4P, Dulux T/E 42 W	700	
PL-T 32 W/4P, F32TBX/4P, Dulux T/E 32 W	525	
PL-T 26 W/4P, F26TBX/4P, Dulux T/E 26 W	425	550
F18TBX/4P, Dulux T/E 18 W		400
PL-C 26 W/4P, F26DBX/4P, Dulux D/E 26 W	475	600
PL-C 18 W/4P, F18DBX/4P, Dulux D/E 18 W	375	400
PL-C 13 W/4P, F13DBX/4P, Dulux D/E 13 W		350
F382D/4P	625	
F282D/4P	450	
F212D/4P	375	500
F162D/4P	300	375

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