

# B30RCT

EMERGENCY LIGHTING EQUIPMENT

# PHILIPS bodine

A Division Of Philips Electronics North America Corporation

**Remote control testing;  
Specification grade: Up to  
3500 lumens; One- or two-lamp  
emergency illumination**

## Product Summary

**UL LISTED/CSA CERTIFIED**  
Factory or Field Installation  
(Damp)



**Illumination Time**  
90 Minutes

**Initial Light Output**  
1450 - 3500 Lumens

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

**Input Voltage**  
120/277 VAC, 60 Hz

**AC Input Current**  
280 mA

**AC Input Power Rating**  
8.0 Watts

**Test Switch**  
Single Pole

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

**Battery Charging Current**  
280 mA

**Recharge Time**  
24 Hours

**Temperature Rating (Ambient)**  
+5°C to +50°C  
(Damp Location)  
0°C to +55°C  
(Dry Location)

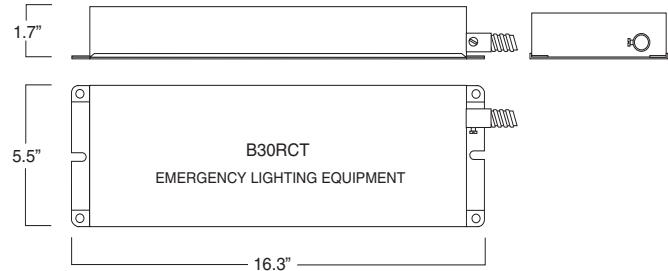
**Charging Indicator Light**  
LED

**Dimensions**  
16.3" x 5.5" x 1.7"  
(414 mm x 138 mm x 44 mm)  
2' (610 mm) Flexible Conduit  
Mounting Center 15.7" (400 mm)

**Weight**  
8.7 lbs. (3.95 kg)

**Remote Control Transmitter**  
Model WHRCT (Sold Separately)

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



## APPLICATION

The B30RCT 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, infrared receiver, charger and electronic circuitry in one red case. One remote control transmitter (model WHRCT, sold separately) can be used to test any fixture equipped with an RCT emergency ballast. The B30RCT can be used with most 17 - 215 W (2' - 8') T5, T8, T9, T10 or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline and energy-saving, and (4-pin) twin and quad compacts. One- or two-lamp operation may be selected (see Table 1). 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 B30RCT is suitable for indoor and damp locations 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 call the factory.

## OPERATION

When AC power fails, the B30RCT immediately switches to the emergency mode, operating either one or two lamps at high lumen output for a minimum of 90 minutes. When AC power is restored, the B30RCT automatically returns to the charging mode. During remote control testing, the B30RCT simulates an AC power failure, causing the emergency ballast to switch to emergency mode and conduct a 30-second or 90-minute discharge test to monitor emergency ballast operation. 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 three (3) seconds to prevent false tripping of the AC ballast end-of-lamp-life shutdown circuits. When testing is complete, the B30RCT returns to the charging mode. Depending on fixture type, safety and maintenance personnel may test emergency ballast operation using a handheld remote control transmitter (see illustration on back for testing range). In addition, the handheld transmitter includes a reset option that cancels unintentional activation. NOTE: For end-user convenience, the emergency ballast is supplied with a single-pole test switch. Manual testing may be conducted at any time.

## WARRANTY

Model B30RCT is warranted for five (5) full years from date of purchase. This warranty covers only properly installed Philips Bodine emergency ballast 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.

## UL, CSA AND CODE COMPLIANCE

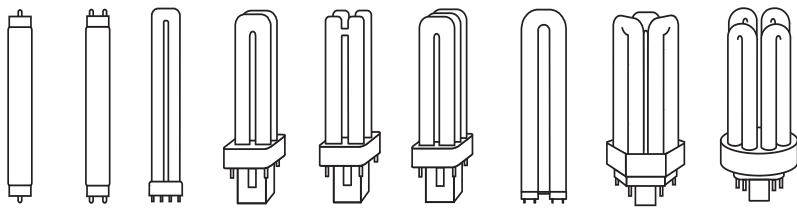
The B30RCT has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and by the Canadian Standards Association (CSA) in accordance with the standards set forth in C22.2 No. 141, "Unit Equipment for Emergency Lighting." The B30RCT is UL Listed and CSA Certified for factory or field installation. Emergency illumination time exceeds the National Electrical Code (NEC), Life Safety Code (NFPA-LSC), National Building Code of Canada (NBC), National Fire Code of Canada (NFC) and UL 90-minute requirements.

## Specifiers Reference

Project \_\_\_\_\_ Type \_\_\_\_\_ Model No. \_\_\_\_\_  
Comments \_\_\_\_\_

L2000054

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## INSTALLATION

The B30RCT 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 B30RCT may be installed 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. A charging indicator light and single-pole test switch are provided. Upon request, a single-pole test switch/monitor plate is provided for remote installation of the test switch and charging indicator light. NOTE: The infrared receiver should be installed flush with the inside of the fixture lens, creating a line-of-sight path to the remote control transmitter.

## EMERGENCY ILLUMINATION

Depending on the number (one or two), wattage and type of lamps selected, the B30RCT produces 1450 to 3500 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 standard fluorescent fixture equipped with a Philips Bodine B30RCT remote control testing fluorescent emergency ballast. Electronic circuitry shall be remote control testing in design and capable of testing emergency lighting for 30 seconds or 90 minutes. The emergency ballast, using a patented circuit, shall delay AC ballast operation for approximately three (3) seconds to prevent false tripping of AC ballast end-of-lamp-life shutdown circuits. The B30RCT shall consist of a field-replaceable, high-temperature, maintenance-free nickel-cadmium battery, infrared receiver, charger and electronic circuitry contained in one 16 5/16" x 5 7/16" x 1 3/4" red metal case with a 2' length of flexible conduit. A solid-state charging indicator light, a single-pole test switch and installation hardware shall be provided. One handheld remote control transmitter with 30-second and 90-minute test sequences and a test reset button (model WHRCT, sold separately) shall be provided per job site and shall be capable of testing multiple fixtures equipped with the RCT feature. The emergency ballast shall be capable of operating [one or two] \_\_\_\_\_ fluorescent lamp(s) (see Table 1) at \_\_\_\_\_ lumens (see Table 2) initial light output in the emergency mode for a minimum of 90 minutes. It shall be suitable for indoor and damp locations. The B30RCT shall have 8 Watts of input power and a 57.6 Watt-hour battery capacity and shall exceed emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed for installation on top of or remote from the fixture and shall be warranted for a full five years from date of purchase.

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Table 1 - Lamp Compatibility

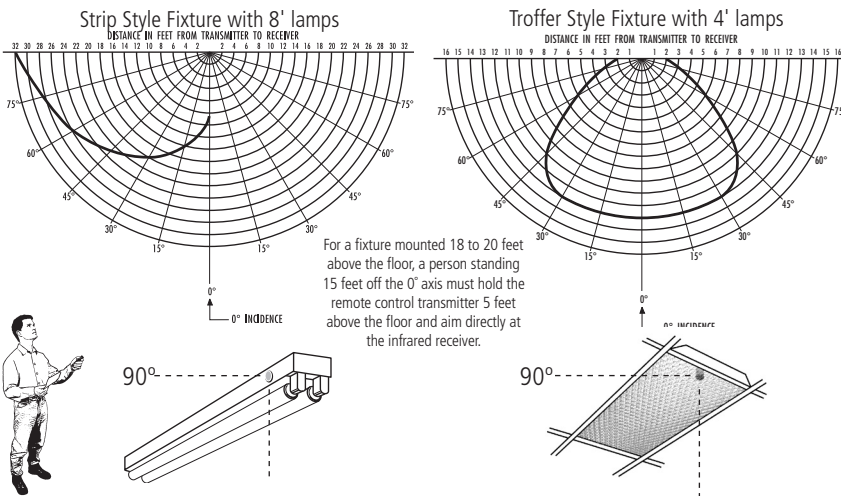
LAMP DIAMETER (T5, T8, T9, T10, T12)	BASE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)
1", 1 1/4", 1 1/2"	Single or Bipin	17 - 40 W (2' - 4')	1
		40 - 215 W (5' - 8')	2
Long Compact	4-PIN (2G11)	18 - 39 W	1
		40 - 55 W	2
Twin/Quad/Triple Twin-Tube Compact	4-PIN (G24q, GX24q)	18 - 42 W	1
			2
2D	4-PIN (GR10q)	16 - 38 W	1
		55 W	2
T5	HO Circline 4-PIN (2GX13)	22 - 55 W	1
	Linear Miniature Bipin	21 - 54 W	1

Table 2 - Lumen Output

LAMP	LUMENS	
	1 Lamp	2 Lamps
FO25, FBO24 T8	2500	2600
FO32, FBO31 T8	3000	3000
FO40 T8	2400	
FO96 T8	3000	
F40 T12, F40/U	3000	3000
F40 T12ES (34W)	2700	2700
F48 T12/HO	3000	
F96 T12	2800	
F96 T12/HO	2900	
F96 T12/VHO	3300	
PL-L 24W, F27/24BX, DULUX L 27W	1800	2300
PL-L 36W, F39/36BX, DULUX L 39W	2900	3500
PL-L 40W, F40/30BX, F50BX, DULUX L 55W	1800	
F282D/4P	2050	2800
F382D/4P	2800	2800
FP28T5/HO	1850	
FP39TF/HO	2100	
FP54T5/HO	2650	
FPC55T5/HO	2300	

Partial listing of lamps operated.

Lumen output will be lower for low mercury compacts.



### OPTIONS:

1. A Test/Monitor Plate with separate test switch and charging indicator light.
2. A Test/Monitor Plate with a single illuminated test switch.

Please call the factory for availability.

L2000054

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