

B50RCT

Fluorescent Emergency Ballast

PHILIPS bodine

A Division Of Philips Electronics North America Corporation

Remote control testing; For damp locations; Specification grade; One- or two-lamp emergency illumination; End-of-lamp-life compatible

Product Summary

UL LISTED

Factory or Field Installation

Illumination Time

90 Minutes

Initial Light Output

Up to 1400 Lumens

Full Warranty

5 Years (NOT pro-rata)

Input Voltage

120/277 VAC, 60 Hz

AC Input Current

320 mA

AC Input Power Rating

4.0 Watts

Test Switch

Single 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

13.3" x 2.4" x 1.5"
(339 mm x 60 mm x 38 mm)
2' (610 mm) Flexible Conduit
Mounting Center 12.8" (325 mm)

Weight

3.6 lbs. (1.64 kg)

Remote Control Transmitter

Model WHRCT (Sold Separately)



APPLICATION

The B50RCT fluorescent 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 compact red case. One remote control transmitter (model WHRCT, sold separately) can be used to test any fixture equipped with a RCT™ emergency ballast. The B50RCT 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, (4-pin) long compacts and 18 W through 42 W 4-pin compact lamps without integral starters. 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 B50RCT 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 call the factory.

OPERATION

When AC power fails, the B50RCT immediately switches to the emergency mode, operating either one or two lamps at a reduced lumen output for a minimum of 90 minutes. 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 seconds to prevent false tripping of the AC ballast end-of-lamp-life shutdown circuits. During remote control testing, the B50RCT 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 testing is complete, the B50RCT returns to the charging mode. Depending on fixture type, safety and maintenance personnel may test emergency ballast operation using a handheld remote control transmitter. 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.

INSTALLATION

The B50RCT 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 B50RCT may be installed inside or on top of the fixture. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C. 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.

UL AND CODE COMPLIANCE

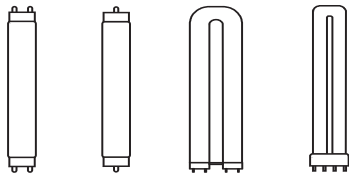
The B50RCT has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and is UL Listed for factory or field installation. Emergency illumination time exceeds the National Electrical Code (NEC), Life Safety Code (NFPA-LSC) and UL 90-minute requirements.

Specifiers Reference

Project _____ Type _____ Model No. _____
Comments _____

L2000061

11/18/10 © Philips Emergency Lighting
P.O. Box 460 Collierville, TN USA 38027-0460
Sales 800-223-5728 FAX 901-853-5009
Tech. Support 888-263-4638
www.philips.com/bodine



B50RCT

Fluorescent Emergency Ballast

Remote control testing; For damp locations; Specification grade; One- or two-lamp emergency illumination; End-of-lamp-life compatible

EMERGENCY ILLUMINATION

Depending on the number (one or two), wattage and type of lamps selected, the B50RCT produces up to 1400 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.

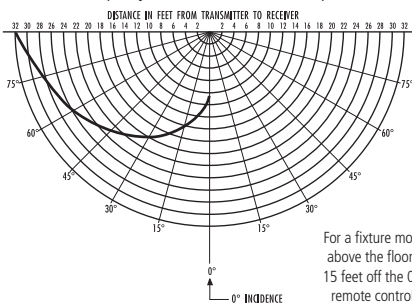
SPECIFICATION

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with a Philips Bodine B50RCT 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 seconds to prevent false tripping of AC ballast end-of-lamp-life shutdown circuits. The B50RCT shall consist of a high-temperature, maintenance-free nickel-cadmium battery, infrared receiver, 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. One handheld transmitter with 30-second and 90-minute test sequences and a test reset button shall be provided per job site (model WHRCT, sold separately) 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 and for sealed & gasketed fixtures, including fixtures rated for wet locations. The B50RCT 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 UL Listed for installation inside or on top of the fixture and shall be warranted for a full five years from date of purchase.

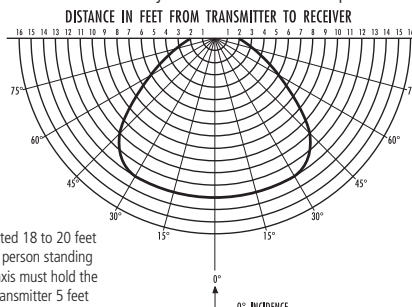
WARRANTY

Model B50RCT is warranted for five (5) 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.

Strip Style Fixture with 8' lamps



Troffer Style Fixture with 4' lamps



For a fixture mounted 18 to 20 feet above the floor, a person standing 15 feet off the 0° axis must hold the remote control transmitter 5 feet above the floor and aim directly at the infrared receiver.

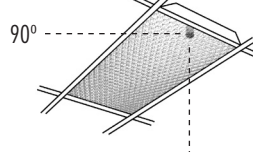
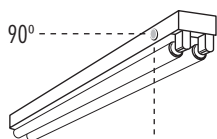


Table 1 - Lamp Compatibility

LAMP DIAMETER (T8, T9, T10, T12)	BASE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)
T8, T9, T10, T12 (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
Compact	4-PIN (G24q, GX24q)	18 - 32 W	1
			2
		42 W	1
2D	4-PIN (GR10q)	16 - 38 W	1
			2
		55 W	1

Table 2 - Initial Lumen Output

LAMP	LUMENS	
	1 Lamp	2 Lamps
FO32, FBO31 T8	1350	1350
FO25, FBO24 T8	1250	1100
FO17, FBO16 T8	1050*	950*
FO96, T8	1400	
F40T12, F40/U	1100	1100
F40T12/ES (34 W)	975*	975*
F48T12/HO	1200	
F96T12, HO, VHO	1100	
PL-L 50 W, F50BX/RS, DULUX L 55 W	900*	
PL-L 40 W, F40/30BX, DULUX L 40 W	900*	
PL-L 36 W, F39/36BX, DULUX L 36 W	1100	1100
PL-L 24 W, F27/24BX/RS, DULUX L 27 W		1000*
F38 2D/4P	1100	1100
F28 2D/4P	1000*	1100

L2000061

11/18/10 © Philips Emergency Lighting
P.O. Box 460 Collierville, TN USA 38027-0460
Sales 800-223-5728 FAX 901-853-5009
Tech. Support 888-263-4638
www.philips.com/bodine

For the most current technical information and notices, please visit TechNotes on our website.