bodine

Emergency Ballast

Linear Fluorescent

B50CT

Emergency ballast for fluorescent and Type A TLED lamps
Meets CEC Title 20 efficiency standards

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

Product order number:
B50CT

12NC number:
913702469601

Specifications

UL Listed for US and Canada
Listed to UL 924 and tested to CSA 22.2 No. 141
Factory or Field Installation (Indoor and Damp)

Illumination Time
90 Minutes

Initial Light Output
Up to 1400 Lumens

Full Warranty
5 Years (NOT pro-rata)

Universal Input Voltage
120-277 VAC, 50 or 60 Hz

AC Input Current
60 mA

AC Input Power Rating
5.0 Watts

Test Switch/Charging Indicator Light
Two-Wire Illuminated Test Switch (2W-ITS)*

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

Recharge Time
24 Hours

Charging Indicator Light
LED

Temperature Rating (Ambient)
0-50°C (32-122°F)

Dimensions
13.31" x 2.20" x 1.18" (338 mm x 56 mm x 30 mm)
Mounting Center 12.79" (325 mm)

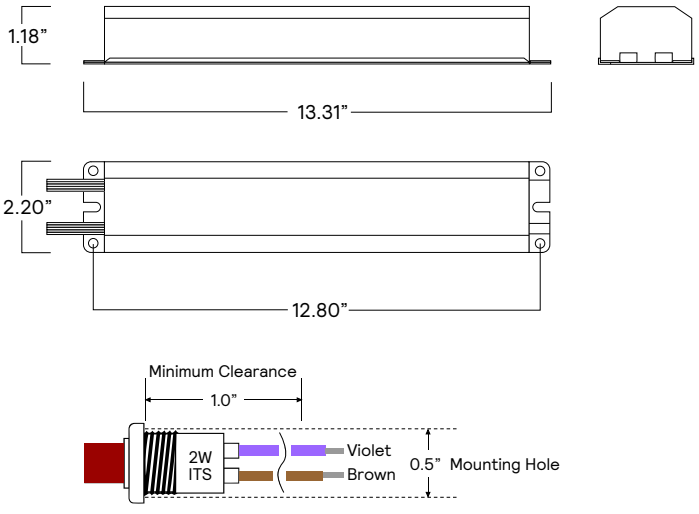
Weight
2.78 lbs. (1.26 kg)

Benefits

- Compatible with 7-16.5W Type A TLED lamps (including LED T8 InstantFit)
- Meets CEC Title 20 efficiency standards
- Low profile case (1.18"H)
- Universal Input (120 through 277 VAC, 50/60Hz)

Dimensions

13.31" x 2.20" x 1.18" (mounting center 12.79")



An illuminated test switch/charging indicator light is provided.

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Application

The B50CT emergency ballast works in conjunction with an AC ballast to convert new or existing fluorescent or TLED 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 and electronic circuitry in one compact metal case. B50CT operates one lamp in emergency mode (see Table 1). It is compatible with most single- and multi-lamp electronic and dimming AC ballasts. If used in an emergency-only fixture, no AC ballast is necessary. The B50CT 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 contact Technical Support. Recommended applications include: international line voltages from 120 through 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 B50CT immediately switches to the emergency mode, operating one lamp at a reduced lumen output for a minimum of 90 minutes. When the 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.

Installation

The B50CT 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 B50CT may be installed inside, 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 remoting 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.

Emergency Illumination

Depending on the wattage and lamp selected, the B50CT produces up to 1400 lumens initial emergency light output (see Table 2).

Specification

Emergency lighting shall be provided by using a fluorescent or TLED fixture equipped with a Bodine B50CT emergency ballast. This emergency ballast shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one 13.31" x 2.2" x 1.18" metal case. A solid-state charging indicator light to monitor the charger and battery, a 2-wire illuminated test switch and installation hardware shall be provided. 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 emergency ballast shall be capable of operating [one] _____ lamp (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 B50CT shall operate at any line voltage from 120 through 277 VAC at frequencies of 50 or 60 Hz. The B50CT shall have 5.0 Watts of input power and shall exceed emergency standards set forth by the current NEC and meets Title 20 CEC (California Energy Commission) standards. The emergency ballast shall be UL Listed for factory or field installation inside, on top of or remote from the fixture.

Warranty

Model B50CT is warranted for five (5) full years from date of purchase. Please see detailed warranty information on our web site.

Table 1 Lamp Compatibility

LAMP (DIAMETER)	BASE TYPE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)
(1", 1¼", 1½") T8, T12	Single or Bipin	17 - 40 W (2'-4')	1
LONG COMPACT	4-PIN (2G11)	18 - 39 W	1
		40 - 55 W	1
TWIN/QUAD/TRIPLE TWIN-TUBE COMPACT	4-PIN (G24q, Gx24q)	13 - 42 W	1
T5 & T5 HO	MINIATURE BIPIN	14 - 54 W (2'-4')	1
	HO CIRCLINE	22 - 55 W	1
Type A TLED lamps (including Philips LED T8 InstantFit)	Bipin	7 - 16.5 W	1

Table 2 Initial Lumen Output

LAMP	LUMENS
F54T5/HO	1400
1xF32T8	1130
TL5C22W/840 Circline	730
TL5C55W/840 Circline	985
PL-L 40W/830/4P	1190
PL-L 55W/840/4P	1220
TLED T8 16.5W	1140

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