# bodine

## **Emergency Inverter**

**Dimming Inverter** 

BTB15D



Emergency Inverter for Dimmable Type B TLED Lamps

Emergency Output (120 VAC) Phase-Cut Dimming up to 12.5 VA

Product order number:

BTB015B2UK45L1PDI1

BTB015B2UK45C1PDI1 (model with conduit)

12 NC number:

913702489201 913702489301

Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:
Notes:	

## **Specifications**

## UL Listed for US and Canada

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

#### Maximum Connected Load

15 W

## Maximum Output Power

12.5 VA into load

## Illumination Time

90 Minutes

## AC Input Voltage and Current

120-277VAC, 50/60 Hz, 80 mA (charging)

## Recharge Time

24 Hours

## Test Switch/Charging Indicator Light

Two-Wire Illuminated Test Switch (2W-ITS is a Class 2 device)

#### Battery

Maintenance-Free Li-ion Battery

## Output Voltage, Emergency

120 VAC +/- 10%

## **Output Frequency**

60 Hz, ± 5%

## Dimmina

Reverse Phase-Cut Type

## Transfer Time

Up to 5 seconds

## Temperature Rating (Ambient)

32-113°F (0-45°C)

### **Dimensions**

15.34" L x 2.25" W x 1.16" H (390 mm x 58 mm x 30 mm) Mounting center - 15.0" (381 mm)

## Weight

2.72 lbs (1.23 kg)

## Warranty

5 years (NOT pro-rata)

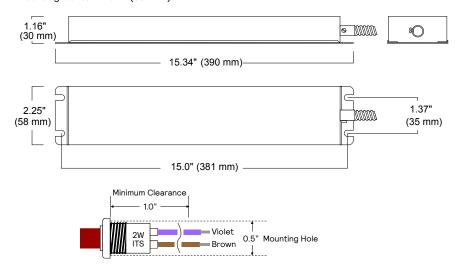
## Benefits:

## Compatible with dimmable Type B TLED lamps (up to 15 W)

- Maximum 12.5 VA output power
- Use in field-installed dimmable TLED Type B retro-fit luminaires or factory luminaires
- Meets California Energy Commission Title 20 efficiency requirements
- · Remote-mounting up to 250 feet maximum

## **Dimensions**

15.34" x 2.25" x 1.16" (390 mm x 58 mm x 30 mm) Mounting Center - 15.0" (381 mm)







# BTB15D

## Emergency Inverter for Dimmable Type B TLED Lamps

## **Application**

The Bodine BTB15D Emergency Lighting Inverter works in conjunction with dimmable Type B TLED lamps to create an emergency lighting system. The BTB15D operates a maximum load of 12.5 VA. It allows the connected lamp(s) to be on, off, switched or dimmed without affecting emergency operation. Each unit consists of batteries, charger and electronic circuitry in one steel case. The BTB15D is NOT suitable for use with HID lighting nor is it rated for outdoor mounting locations.

## **Operation**

Upon failure of normal power, the BTB15D begins providing emergency power to the connected lighting load for a minimum of 90 minutes. A low voltage disconnect circuit protects the inverter batteries from damage by deep discharge during prolonged power failures. When normal power is restored, the BTB15D automatically returns to charge mode. The battery capacity is fully restored in 24 hours.

## Dimming

The BTB15D features a phase-cut dimming control output similar to the same dimmers used for incandescent and some LED retrofit lamps. This dimming capability allows a lighting load with up to a 15 W maximum input power to be dimmed to a 12.5 VA maximum emergency output power. The emergency mode output dimming voltage is automatically controlled by the BTB15D electronic circuitry to maintain up to 12.5 VA output

throughout the loss of AC power. The BTB15D passes the normal room switched/phase-cut AC mains during normal operation (AC mains on) so normal dimming operation of the luminaire is not affected.

## Installation

The BTB15D does not affect normal fixture operation and may be used with a switched or unswitched fixture. It can be installed inside, on top of or in close proximity to the fixture.

## **Code Compliance**

The BTB15D has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment". The BTB15D is UL Listed 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.

## **Emergency Illumination**

The BTB15D supports up to 12.5 VA of emergency power for a minimum of 90 minutes.

## Specification

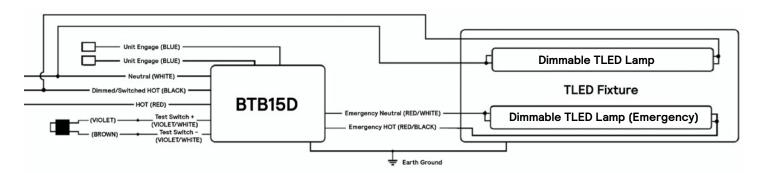
Emergency lighting shall be provided by using a standard fixture powered with a Bodine BTB15D inverter. The BTB15D unit consists of batteries, and electronic battery charging and output circuitry contained in one metal case. The BTB15D unit

shall be capable of powering dimmable Type B TLED lighting fixtures rated at up to 15 W per lamp at 0°C to  $45\,^{\circ}\mathrm{C}$  for a minimum of 90 minutes by the use of a phase-cut dimming control. The BTB15D shall allow the emergency fixture to be on, off, switched or dimmed without affecting emergency operation. The BTB15D unit shall meet or exceed emergency standards set forth by the current NEC and the Canadian Electrical Code. This device complies with Part 15 of the FCC Rules and meets California Energy Commission Title 20 efficiency requirements. It shall be UL Listed for the US and Canada, suitable for damp locations, and warranted for a full five years from date of manufacture.

## Warranty

The BTB15D is warranted for five (5) years from the date of manufacture. This warranty covers only properly installed Bodine BTB15D emergency units used under normal conditions. For the warranty period, Signify will, at its option, repair or replace without charge a defective inverter provided it is returned to the factory transportation prepaid whereas an inspection will be conducted to determine if the unit is defective under the 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 inverter.

## **Schematic**



# BTB15D

# Emergency Inverter for Dimmable Type B TLED Lamps

Ordering Guide example: BTB015B2UK45L1PDI1

Product Category BTB	Watts	Case B2	Input Voltage	Temperat	ure <b>45</b>	Type/Harness	Dimming PD	Packaging I	Generation
BTB Bodine Type B TLED	015	B2 (see page 1 for case dimensions)	<b>U</b> 120-277V	K Min. Temp. 0°C	45 Max. Temp. 45°C	L1 Leads only without conduit C1 Conduit around leads	PD Phase-cut dimming	I Individual pack	1

### **Lithium Battery Shipping Regulations**

To comply with IATA provisions for air transporting lithium batteries, and for a step by step guidance through the shipping process, please visit <a href="https://www.iata.org/en/publications/store/lithium-battery-shipping-regulations/">https://www.iata.org/en/publications/store/lithium-battery-shipping-regulations/</a>.

To view a Classification Flowchart for package marking requirements, please visit <a href="http://www.iata.org/whatwedo/cargo/dgr/Pages/lithium-batteries.aspx">http://www.iata.org/whatwedo/cargo/dgr/Pages/lithium-batteries.aspx</a>. Scroll to the "Guidance Material" section and click on the provided "Guidance Document" PDF link. The Classification Flowchart will be found on page 5. The BTB15D battery cell capacity is less than 20Wh, and the battery pack capacity is less than 100 Wh.



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