

# BSL17C-C2ST

## Installation Instructions

Self-Testing Emergency LED Driver

UNIVERSAL INPUT

PHILIPS  
bodine



CLASS 2 OUTPUT

### **! IMPORTANT SAFEGUARDS !**

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

## READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. To prevent high voltage from being present on yellow & yellow/black output leads prior to installation, Converter connector must be open. Do not join converter connector until installation is complete and AC Power is supplied to the emergency driver.
2. This product is for use with an emergency LED lighting load and supplies up to 7.0 W of power with a maximum voltage of 50 VDC in emergency mode.
3. Make sure all connections are in accordance with the National Electrical Code or Canadian Electrical Code and any local regulations.
4. To reduce the risk of electric shock, disconnect both normal and emergency power supplies and converter connector of the emergency driver before servicing.
5. This emergency driver is for factory installation only.
6. This product is suitable for use in damp locations where the ambient temperature is 0°C minimum, +50°C maximum. Product is also suitable for installation in sealed and gasketed fixtures. Product is not suitable for heated air outlets and wet or hazardous locations. Maximum allowable case temperature is 65°C. See product label for measurement location.
7. An unswitched AC power source is required (120-277 VAC, 50/60 Hz).
8. Do not install near gas or electric heaters.
9. Do not attempt to service the battery. A sealed, no-maintenance battery is used that is not field replaceable. Contact the manufacturer for information on service.
10. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
11. Do not use this product for other than intended use.
12. Servicing should be performed by qualified service personnel.
13. Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.

## SAVE THESE INSTRUCTIONS



Ni - Cd

**THIS PRODUCT CONTAINS A RECHARGEABLE NICKEL-CADMIUM BATTERY.  
THE BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.**

04/24/15

© Philips Emergency Lighting

## OPERATION

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During normal operation, AC power is applied and the self-testing emergency driver charges the battery. Connecting the (red and white) Converter connector wires enables the emergency circuit and supplies power to the control/monitor circuit and charging indicator light. The self-testing emergency drive continually monitors the unit health. Should the unit detect an unusual condition, the indicator light will flash.

When AC power fails, the self-testing emergency driver automatically switches to emergency mode, keeping the LED load illuminated at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the self-testing emergency driver returns to charging mode.

## SELF-TESTING OPERATION

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This unit contains a control/monitor circuit that automatically performs a 30-second discharge test once a month, and a full 90-minute discharge test once a year. During routine testing, the self-testing emergency driver simulates an AC power failure causing the unit to automatically switch to emergency mode. The unit will monitor the operation of the LED load, battery voltage, LED load connections and emergency duration. If the emergency system functions properly, then the unit will return to normal mode. Should the unit detect any problems, the indicator light will flash per failure condition (see Troubleshooting guide) until the condition has been corrected and the unit passes the next test.

To reset a failure indication turn off AC power to the emergency driver for a minimum of 10 seconds, or briefly push the 2 wire ITS. If the condition has not been corrected by the next scheduled test, the unit will once again detect the failure and signal the failure indicator.

To perform manual self-diagnostic test push and hold 2 wire ITS for minimum of 5 seconds. Once 2 wire ITS is released emergency driver will perform 5 second diagnostic test. During this test, unit will monitor the operation of the LED load, battery voltage, and LED lamp connections. If the emergency system functions properly, then the unit will return to normal mode. Should the unit detect any problems, the indicator light will flash per failure condition (see Troubleshooting guide) until the condition has been corrected and or the unit passes the next test.

## TROUBLESHOOTING GUIDE

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STATUS INDICATOR LIGHT	PROBLEM	CORRECTIVE ACTION
Light on not flashing	None	None, Unit is Operating Correctly.
Flashing 2 times every 5 seconds	Battery Error	Charge battery. If after an hour failure is still indicated, see action below.
Flashing 3 times every 5 seconds	Charging Error	Ensure input wiring is correct and verify voltage is correct and stable. (WHITE, BLACK wires)
Flashing 4 times every 5 seconds	Output Error	<ol style="list-style-type: none"><li>1. Output might be either open or short circuited.</li><li>2. Ensure that fixture wiring is in accordance with proper wiring diagram.</li><li>3. Ensure connections of Yellow and Yellow Black wires.</li></ol>
Continuous Flashing	Application out of range	Ensure LED load is operational and specified for self-testing emergency driver

# MAINTENANCE

This self-testing emergency driver automatically performs required routine testing. Results are reported to maintenance personnel via the indicator light.

**Note:** Maintenance personnel should periodically check the indicator light. If the indicator light is flashing, follow steps in the *Troubleshooting Guide*.

## Failure Status will be reset when the unit passes:

- The next automatic test, or
- Briefly pressing the 2 wire ITS, or
- An actual power failure exceeding 10 seconds.

**NOTE:** The converter connector (red and white wires) must be connected for the AC driver to operate normally.



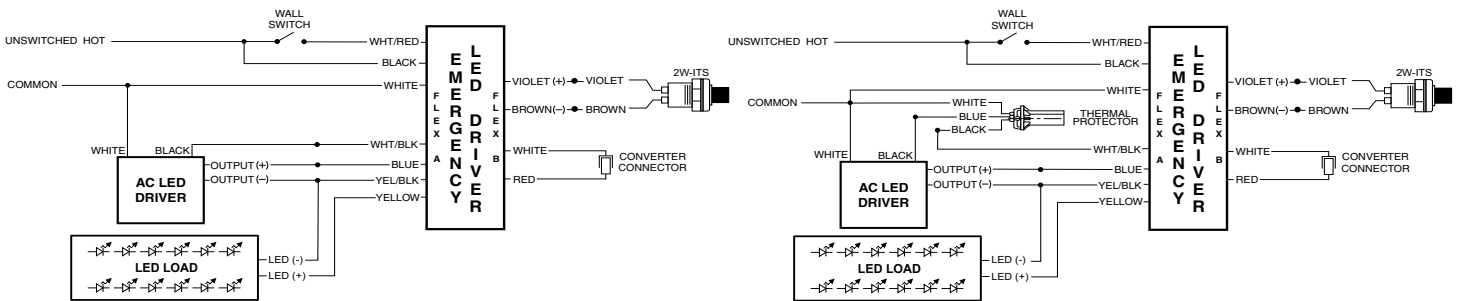
**WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON YELLOW & YELLOW/BLACK OUTPUT LEADS PRIOR TO INSTALLATION, CONVERTER CONNECTOR MUST BE OPEN. DO NOT JOIN CONVERTER CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY DRIVER.**

**NOTE:** Make sure the necessary branch circuit wiring is available. An unswitched source of power is required. The emergency driver must be fed from the same branch circuit as the AC driver.

## EMERGENCY DRIVER AND AC DRIVER MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER DRIVERS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

### WIRING DIAGRAMS



WITH THERMAL PROTECTOR