

## Unsurpassed Technology Makes Philips Emergency Lighting The Industry Leader



**Philips Bodine ELI Emergency Lighting Mini Inverters and B4CF3 Cold-Pak® are two examples of the superior technology that keeps us on top.**

## Think Cold: B4CF3 Cold-Pak®

The Philips Bodine B4CF3 Cold-Pak® extended-temperature fluorescent emergency ballast for compacts provides one-lamp emergency lighting in temperatures ranging from -4° F to +131° F. Its small footprint (6.0" x 5.5" x 1.62") makes the emergency ballast ideal for diminutive or otherwise space-limited fixtures. B4CF3 installs easily into fixtures that will not accommodate other Cold-Pak models.

### Don't Be Left in the Cold



B4CF3, because of its size, eliminates remote mounting issues while providing reliable, code-compliant emergency lighting. It is the perfect fluorescent emergency ballast choice for bollards, sconces, downlights and similar fixtures often used in outdoor egress lighting.

Visit our website at [www.philips.com/bodine](http://www.philips.com/bodine) to download the B4CF3 specification sheet and installation instructions or to learn more about other members of the Cold-Pak family: B50Cold-Pak, B4CF1 and B4CF2.

#### Product Highlights

- Operates in ambient temperatures ranging from -4° F to +131° F (-20° C to +55° C)
- Designed to fit into small spaces for greater application flexibility  
Dimensions: 6.0" x 5.5" x 1.62"  
(153 mm x 140 mm x 41 mm)
- Provides up to 1250 lumens initial light output at 25° C
- Suitable for damp locations and sealed & gasketed fixtures
- Compatible with one 13-42 W twin, quad or triple twin-tube, 22-40 W T5 circline or 18-39 W long compact
- 5-year full warranty
- UL Listed for factory or field installation



#### ELI Emergency Lighting Mini Inverters

The Philips Bodine ELI-100-SD and ELI-250-SD Self-Diagnostic Emergency Lighting Mini Inverters provide emergency power to fluorescent, incandescent and LED emergency lighting fixtures. ELI units are ideal for schools, office buildings, theaters, hotels, shopping centers, restaurants, grocery stores, parking garages, stairways and many other locations.

#### Product Highlights

- Provide a maximum 100 W for **ELI-100-SD** and 250 W for **ELI-250-SD**
- Support at least 90 minutes of emergency lighting, as required by code
- Automatically conduct 15-minute tests of emergency operation every 25-30 days
- Designed for surface mount installation up to 1000 feet from fixtures
- Power indoor and outdoor applications
- Allow fixtures to be on, off, switched or dimmed
- UL Listed

Unlike fluorescent emergency ballasts, ELI mini inverters supply power to the input side of the fixture. This design eliminates compatibility issues. ELI units provide emergency power to both indoor and outdoor lighting fixtures, but because the ELI mini inverters are installed indoors, the battery is protected from extreme conditions. This protection prolongs battery life, maximizes run time and reduces maintenance costs.

## Easy Code-Compliant Testing

Testing and maintenance of emergency lighting equipment are critical and code-mandated activities. An interest in occupant welfare is foremost. Liability is also an issue. But despite code requirements and common-sense reasons to test and maintain equipment, testing and maintenance do not always get done as they should. Time and cost are commonly cited in compliance failure. Philips Emergency Lighting has the solution.

### Remote Testing

Philips Bodine RCT remote control testing technology allows maintenance personnel to test emergency lighting equipment from up to 32 feet away using a handheld remote control transmitter. No ladders or extensions are required.

RCT units include **B30RCT** and **B50RCT**, both fluorescent emergency ballasts, and **CheckMate ETI**, a retrofit device for exit signs and emergency lighting wall packs. Users simply point, click and test. More specifically, users point the transmitter toward the infrared receiver on the emergency ballast or **CheckMate** and then select the 30-second or 90-minute code-compliant test option.



### Self-Testing

Philips Bodine REDiTEST® self-testing/self-diagnostic fluorescent emergency ballasts further simplify compliance. REDiTEST emergency ballasts automatically conduct 30-second tests monthly and 90-minute tests annually. In addition, they continuously monitor their charging current and battery voltage. If a problem arises, they alert maintenance personnel via a flashing indicator light and user-selectable audible alarm. The REDiTEST line includes **B30ST**, **B50ST**, **LP600STU** and **B74CST**.

Visit [www.philips.com/bodine](http://www.philips.com/bodine) for more information on easy testing options.



## New Wiring Solution for Step-Dimming Applications

The patented Philips Bodine ELC (end-of-lamp-life compatibility) circuit resolved compatibility issues with most program start ballasts. Feeding the switched hot through the emergency ballast from the white/red lead to the white/black lead after a short delay avoided the erroneous EOL (end-of-lamp-life) shutdowns that plagued the older products (see Fig. 1).

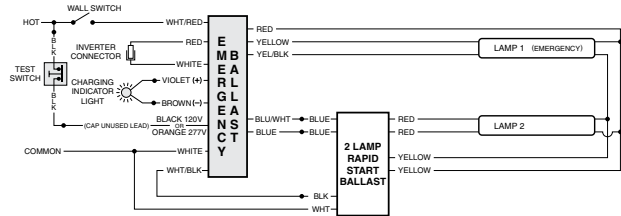


Figure 1

Step-dimming ballasts have two switched hot inputs, either of which can initiate an EOL error check (see Fig. 2). One input can be delayed in the standard ELC wiring, but the second must be delayed, too. We originally tested and approved adding our GTD Generator Transfer Device to this lighting scheme, exploiting the inherent delay in the GTD to avoid shutdown from the second input. Unfortunately, the GTD solution meant an increased cost for adding additional equipment. For obvious reasons, this was not an acceptable alternative for our customers.

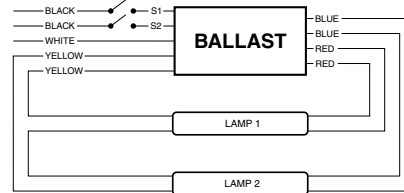


Figure 2

We went back to the drawing board and came up with a new solution. Because adding a second delay circuit for the second input was cost prohibitive, we decided to try delaying the application of the neutral to the AC ballast. This approach proved successful. It involves routing the two switched hot inputs to the step-dimming ballast around the emergency ballast and directly to the step-dimming ballast (see Fig. 3). The incoming fixture neutral is fed to the white lead and the white/red lead on the emergency ballast. The white lead on the step-dimming ballast connects to the white/black lead on the emergency ballast only.

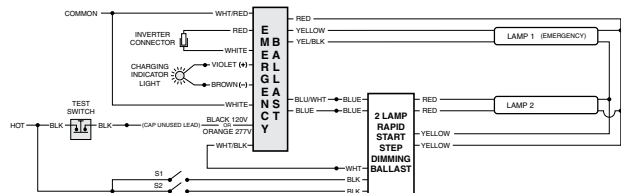


Figure 3

When power is restored after an outage, the emergency ballast transitions out of emergency mode and enables the step-dimming ballast output to be fed through to the lamp(s). As the step-dimming ballast input power delay times out, the neutral input on the white/red lead is switched through to the white/black lead and the white lead on the step-dimming ballast. This permits the ballast to power up and drive the lamp(s).



## Discontinued Products

The following products are no longer available.

- **HB-DL7** AC/Emergency LED Driver, PLED 2C  
(No replacement)
- **Odyssey** AC/Emergency LED Driver, PLED 4C  
(No replacement)
- **BDA04-350** LED Driver (No replacement)
- **B35ST** Fluorescent Emergency Ballast  
(Replaced by B30ST, which has been upgraded to operate T5 HO lamps)
- **LP400** Low-Profile Fluorescent Emergency Ballast  
(As of 12/31/09, substitute with B100LP or LP500)
- **CB80 Series** Central Battery Ballasts  
(No replacement)
- All **CB90 Series** products **EXCEPT** CB90-48 volt  
(No replacement)
- **Tran-Bal** Inverter Ballast Series C, J, K, P & S  
(No replacement)

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