PHILIPS bodine









Philips Emergency Lighting

Solutions for Emergency Lighting Applications

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ADVANCEMENTS IN NEW TECHNOLOGY

Philips Emergency Lighting excels in developing innovative, award-winning technologies that solve emergency and specialty lighting problems. Our solid commitment to research and development and to solution-driven product design has made Philips Bodine a leader in the lighting industry.

Philips Emergency Lighting is the solution company for emergency lighting applications.

This brochure provides a brief introduction to the Philips Bodine product line. Please call the factory at 800-223-5728 or visit us online at **www.philips.com/bodine** to learn more.

SELF-TEST

Philips Bodine products pass rigorous

UL is a not-for-profit product testing, safety and certification organization. Submission of products to UL is voluntary. However, numerous codes, regulations and mandates at national, state and local levels exist that compel testing of products by a nationally recognized laboratory. In the U.S., UL is probably the most well known of such laboratories and the UL mark is

Philips Bodine is always happy to comply with testing. Life safety is our business.

for factory installation only.

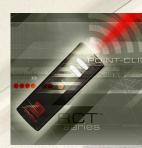
widely respected.

testing by Underwriters Laboratories and are either UL Listed for field or factory installation or UL Component Recognized



REDITEST® emergency ballasts ensure readiness of emergency lighting equipment by automatically testing emergency lighting in accordance with code. REDITEST continuously monitors the charging current and battery voltage and automatically tests emergency operation every 30 days for 30 seconds and once a year for 90 minutes.

REMOTE CONTROL



To ensure that emergency lighting is functioning properly, the National Electrical Code® and Life Safety Code® require periodic testing, visual inspections and written records of test results for all emergency lighting. The RCT™ remote control testing emergency ballasts and RCT™ retrofit modules provide a simple testing alternative for emergency lighting. The new CheckMate™ allows equally simple testing for wall packs and exit signs.

GREEN



Philips Bodine has introduced an emergency ballast line compatible with today's low-mercury lamp technology. Our new and innovative product line allows building lighting systems to "go green" without compromising code-required emergency lighting and, more importantly, without compromising occupant safety.

LOW-PROFILE



Technological advancements in fluorescent lamp and electronic ballast designs have led to the development of innovative, space-saving fluorescent fixtures. LP™ Series low-profile fluorescent emergency ballasts accommodate such fixtures.

COLD-PAK/DAMP



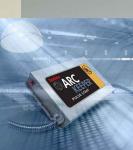
Cold-Pak® extended-temperature fluorescent emergency ballasts provide reliable, code-compliant emergency lighting in environments with temperatures as extreme as 20 below! BDL™ Series emergency ballasts for damp location fixtures have been designed specifically to meet the challenges of conditions where exposure to moderate amounts of moisture is likely.

GTD/GEN



GTD™ and GTD20A™ permit generator or central inverter systems to power emergency lighting regardless of local switch position (on/off). The GEN™ Series fluorescent backup ballasts allow occupants to continue working by providing uninterrupted, high illumination between the time AC power is lost and the emergency generator powers lighting.

ARC KEEPER



The ARC Keeper® HID Backup Ballast offers breakthrough technology for metal halide HID lighting systems. The ARC Keeper catches and maintains the lamp arc during AC power sags, interruptions or failures that would otherwise be problematic for the lamp.

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LINEAR PRODUCTS

B33. Up to 3400 lumens. Operates two or three 32 W (4') T8s or two 40-55 W (4-pin) long compacts. For use with instant start parallel AC ballasts only.

B30. Up to 3500 lumens. Operates one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps; one or two 18-42 W (4-pin) twin, quad or triple twin-tube lamps; or one 18-55 W or two 18-39 W (4-pin) long compacts.

B50. Up to 1400 lumens. Operates one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps or one 18-55 W or two 18-39 W (4-pin) long compacts.

B60. Up to 700 lumens. Operates one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps or one (4-pin) long compact.

B70A. Up to 700 lumens. Operates one 17-215 W (2'-8') T8, T10 or T12 lamp or one (4-pin) long compact. B70A provides two-hour runtime with one 17-32 W T8 or one 20-40 W T10 or T12.

B90. Up to 600 lumens. Operates one 17-40 W (2'-4') T8, T10 or T12 lamp or one (4-pin) long compact.

B100. Up to 450 lumens. Operates one 17-40 W (2'-4') T8, T10 or T12 lamp or one (4-pin) long compact.



COMPACT PRODUCTS

*EOLL = end-of-lamp-life.

B75C. New! Up to 1200 lumens. Operates one 32-70 W (4-pin) triple twin-tube compact lamp. EOLL* compatible.

B84CG. New! Up to 1250 lumens. Operates one 13-42 W twin, quad or triple twin-tube lamp; one 22-40 W T5 circline; or one 18-39 W long compact lamp. Compatible with low-mercury amalgam lamps. With conduit. Suitable for damp locations. EOLL compatible.

B94CG. New! Up to 750 lumens. Operates one 13-42 W (4-pin) twin, quad or triple-tube compact. Compatible with low-mercury amalgam lamps. Suitable for damp locations. EOLL compatible.

B4CFG. New! Up to 1250 lumens. Operates one 13-42 W twin, quad or triple twintube lamp; one 22-40 W T5 circline; or one 18-39 W long compact lamp. Compatible with low-mercury amalgam lamps. Without conduit. Suitable for damp locations. EOLL compatible.

BDL94C. Up to 750 lumens. Operates one 13-42 W or two 13-39 W (4-pin) twin, quad, triple twin-tube or long compacts. Suitable for damp locations. EOLL compatible.

B413. Up to 625 lumens. Operates one 5-13 W (2-pin) twin-tube or 9-13 W (2-pin) quad compact lamp.

B426. Up to 950 lumens. Operates one or two 10-26 W (2-pin) twin, quad or triple twin-tube compact lamps.

B463. Up to 650 lumens. Operates one 10-26 W (2-pin) quad or triple twin-tube compact.





Applications

- **Pendant**
- **Cove**
- **▶** Recessed
- **▶ Surface-Mount**
- Architectural

The Solution for Aesthetically Sensitive Applications

LPTM **Series** low-profile fluorescent emergency ballasts permit ballast channel installation into space-limited fixtures. Their narrow height and width design makes them ideal for use in aesthetically sensitive applications.

LP models

- ▶ Provide code-required emergency lighting without detracting from fixture design. Architectural aesthetics are protected without sacrificing emergency lighting performance. Form + Function = LP Series
- Reduce the need for remote mounting, as the emergency ballast can be installed inside the fixture
- Are designed for T5s, T8s, HO T5s and HO T8s



A self-testing model, LP600STU, is also available.



B50LP

- Specification Grade
- ▶ 1100-1200 lumens initial light output
- ▶ Operates one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps or one 18-55 or two 18-39 W (4-pin) long compact lamps
- 1.18" H x 1.18" W x 21.5" L
- ▶ Suitable for damp locations
- Patented



LP600

- Specification Grade
- ▶ 600-1325 lumens initial light output
- ▶ One-lamp operation for standard and HO T5s & T8s
- Doperates one 14-54 W (2'-4') standard or high-output T5; one 17-55 W (2'-5') standard or high-output T8; or one 36-55 W (4-pin) long compact
- 1.18" H x 1.18" W x 21.5" L
- ▶ Suitable for damp locations
- Patented, CSA Certified



LP550

- ▶ 390-700 lumens initial light output
- ▶ One-lamp operation for standard and HO T5s & T8s
- Operates one 14-54 W (2'-4') standard or high-output T5; one 32 W (4'), 40 W (5') or 44 W HO (4') T8; or one 36-55 W (4-pin) long compact
- ▶ 1.18" H x 1.18" W x 18.5" L
- Patented



LP500

- ▶ 370-520 lumens initial light output
- Operates one 14-28 W (2'-4') standard T5
- 1" H x 1.18" W x 18.5" L
- Patented

LP400

- ▶ 450 lumens initial light output
- Doperates one 32 W (4') T8
- 1" H x 1.5" W x 14.1" L

Bring On the Cold

The **B50Cold-Pak**® extended-temperature fluorescent emergency ballast for linear lamps and **B4CF1** and **B4CF2 Cold-Pak**® models for compact lamps allow users to provide emergency lighting under challenging conditions.

Cold-Pak models:

- Operate in temperatures ranging from -20° C to +55° C (-4° F to + 131° F), in damp locations and in sealed & gasketed fixtures*
- Provide a means of meeting code requirements for outdoor egress emergency lighting
- Consume little power
- Are suitable for smaller fixtures (compact B4CF1 and B4CF2)
- Are ideal for a variety of applications, including wall sconces, down lights, bollards, outdoor canopies, cold storage areas, meat processing facilities, parking garages and unheated outdoor locations, such as ballpark restrooms



Applications

- **▶** Cold Storage
- ▶ Parking Garages
- **Stairwells**
- **Bollards**
- **Covered Walkways**



B50COLD-PAK®

- Specification Grade
- ▶ 850-1200 lumens initial light output
- ▶ One- or two-lamp operation for T8-T12 lamps. The B50Cold-Pak works with one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps or with one 18-55 W or two 18-39 W (4-pin) long compact fluorescent lamps.
- Suitable for damp locations
- Patented



B4CF1 COLD-PAK®

- Specification Grade
- ▶ 700-1250 lumens initial light output
- ▶ One-lamp operation for one 13 42 W compact or one 18-39 W long compact
- No condu
- ▶ Suitable for damp locations
- Patented



B4CF2 COLD-PAK®

- Specification Grade
- ▶ 700-1250 lumens initial light output
- One-lamp operation for one 13 -42 W compact or one 18-39 W long compact
- 2 feet (610 mm) flexible conduit
- Suitable for damp locations
- Patented

^{*}The B50Cold-Pak and B4CF1 are suitable for sealed and gasketed applications.
For information on BDLTM Series or other damp-rated emergency ballasts, please consult the factory or visit us online at www.philips.com/bodine.



Applications

- Schools
- Institutional Facilities
- **Public Buildings**
- **▶** Health Care Facilities

An Automatic Solution to Code Requirements

REDITEST® self-testing/self-diagnostic fluorescent emergency ballasts automatically test emergency lighting for 30 seconds every 30 days and for 90 minutes once a year. In addition, they continuously monitor charging current and battery voltage. An LED and audible alarm alert maintenance personnel to ballast status.

REDITEST emergency ballasts:

- ▶ Reduce labor costs for testing and maintenance
- ▶ Ensure product performance through automatic testing
- Offer end-of-life alertness
- Provide visual and audible signaling of ballast status, including fault conditions; audible alarm is selectable

B35ST

- Specification Grade
- ▶ 1800-3000 lumens initial light output
- Ideal for T5s and HO T5s
- Departes one 28-55 W T5 or HO T5 or one 20-40 W T8, T9, T10 or T12 lamp
- Patented

B30ST

- Specification Grade
- ▶ 1100-3500 lumens initial light output
- Departes one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps or one 18-55 W or two 18-39 W (4-pin) twin, quad, triple twin-tube or long compact lamps
- ▶ Patented, CSA Certified

B50ST

- Specification Grade
- ▶ 1100-1400 lumens initial light output
- Departes one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps or one 18-55 W or two 18-39 W (4-pin) long compact lamps
- Patented, CSA Certified

LP600STU

- New
- Specification Grade
- ▶ 600-1325 lumens initial light output
- Low profile, dimensions: 22.5" L x 1.18" W x 1.18" H
- Universal input (120-277V, 50/60 Hz)
- Deperates one 14-54 W (2'-4') standard or high-output T5; one 17-55 W (2'-5') standard or high-output T8; or one 36-55 W (4-pin) long compact
- ▶ Suitable for damp locations and sealed & gasketed fixtures
- Patented, CSA Pending

B74CST

- Specification Grade
- ▶ 350-1000 lumens initial light output
- Deperates one 13-55 W or two 13-26 W (4-pin) twin, quad, triple twin-tube or long compact lamps. Alternate configurations are available for fixture
- Patented

B50CHIC

- Specification Grade
- ▶ 1100-1400 lumens initial light output
- Departes the same lamps as the B50ST. It is suitable for sealed & gasketed fixtures. The B50CHIC is approved by city of Chicago electrical inspectors.
- Patented

Code-Required Testing Made Easy

The **RCT**[™] remote control testing fluorescent emergency ballasts and **RCT**[™] retrofit modules provide a simple testing alternative for emergency lighting. Testing, using the WHRCT handheld remote control transmitter (sold separately), can be done from up to 32 feet away. No ladders or other extension devices are required.

The **CheckMate**™ ET1 provides remote control testing for existing exit signs and wall packs. The small, easy-to-install unit allows maintenance personnel to conduct 30-second or 90-minute tests at the touch of a button. As with RCT products users simply point-click-test from up to 32 feet away.

RCT emergency ballasts, RCT retrofit modules and CheckMate units:

- ▶ Simplify manual testing, making it easy to meet code
- Allow those who want to be part of the testing process to participate
- ▶ Can be tested at any time monthly, annually or as frequently as needed
- Are operated with a handheld WHRCT remote control transmitter (sold separately). One WHRCT transmitter can be used to test any fixture equipped with an RCT emergency ballast, RCT module or CheckMate unit.

▶ High Bay Fixtures **▶** Theater Auditoriums

- **Gymnasiums**
 - **▶** Conference Rooms

REMOTE CONTROL

Applications/RCT

Applications/CheckMate[™]

- **Colleges**
- Schools
- **Hospitals**
- Offices





B30RCT

- Specification Grade
- ▶ 1800-3500 lumens initial light output
- Deperates one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps; one or two 18-42 W (4-pin) twin, quad or triple twin-tube lamps; or one 18-55 W or two 18-39 W long compact lamps
- Patented



B50RCT

- Specification Grade
- ▶ 1100-1400 lumens initial light output
- Deperates one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps; or one 18-55 W or two 18-39 W long compact lamps
- Patented



RCT Modules

- ▶ Retrofit Applications
- ▶ The RCT modules work in conjunction with select Bodine emergency/backup ballasts and an AC ballast to convert existing emergency lighting fixtures into remote control testing emergency lighting.
- ▶ Model RCT-C with conduit
- Model RCT-A without conduit
- Patented



CheckMate™

- New
- Retrofit Applications
- ▶ Permits remote control 30-second and 90-minute testing of exit signs and wall packs; 4.05" H x 1.26" L x 1.03" W
- Suitable for damp locations
- ▶ Universal input (120-277V, 60Hz)

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Patented



UNIVERSAL

Applications

- Offices
- Schools
- **▶** Hospitals

International & Special Voltage Requirements

Universal input and extended runtime fluorescent emergency ballasts offer solutions for special applications. Models included in this brochure are UL Listed. Other models are available from the factory.

Universal Input models:

- Minimize inventories. Universal input emergency ballasts are suitable for 120 **through** 277 VAC applications, while standard emergency ballasts are suitable for 120 VAC **or** 277 VAC applications.
- ▶ Simplify wiring and reduce wiring errors. Universal input emergency ballasts offer only one lead, a black lead. Standard products use a black lead for 120 VAC applications and an orange lead for 277 VAC applications.
- Are suitable for use with harsh line conditions. The technology used in Bodine universal input emergency ballasts allows the emergency ballasts to operate well in spite of unfavorable line conditions, such as high harmonic distortion, line fluctuation and noise.

Extended Runtime models offer longer runtimes than required by code. Longer runtimes provide extra time for individuals to exit a building safely. Grade school, hospital and assisted-living facility occupants, for example, may need more than 90 minutes to get out of a building in the event of an emergency. Extended runtime models include the B54 (four hours), B70A (two hours) and B426-2HRS (two hours).

B50U

- Universal input
- ▶ 120 through 277 VAC (50 or 60 Hz)
- ▶ 1100-1400 lumens initial light output
- Produces 1400 lumens initial light output with two 32W (2'-4')T8 lamps or 1100 lumens with two 40 W (2'-4') T12 lamps
- Operates one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps or one 18-55 W or two 18-39 W (4-pin) long compacts

BDL60U

- Universal input
- ▶ 120 through 277 VAC (50 or 60 Hz)
- ▶ 300-700 lumens initial light output
- Operates one 17-215 W (2'-8') or two 17-40 W (2'-4') T8, T9, T10 or T12 lamps or one 18-55 W or two 18-39 W (4-pin) long compacts
- Provides two-hour illumination with one (4') T8
- Suitable for damp locations and sealed & gasketed fixtures

BDL50U

 Same as B50U except suitable for damp locations and sealed & gasketed fixtures

Products for Generator Systems

LOCAL SWITCHING DEVICES

The **GTD**TM and **GTD20A**TM make it possible to supply emergency lighting without night-lighting. Should normal power fail, the devices, which operate on standard circuitry, allow a generator or central inverter system to bring on emergency fixtures regardless of local light switch position (on/off).

Because the **GTD** and **GTD20A** provide emergency lighting *only when it's needed*, thousands of energy hours can be saved each year.

The GTD/GTD20A:

- ▶ Provide energy and cost savings
- Offer dual (GTD) or universal (GTD20A) input; similar products do not
- ▶ Provide controllability of generator-fed or central inverter system-fed emergency lighting



GTD™

Generator Transfer Device

- Is a transfer device; transfers the neutral; similar products do not
- Is installed in areas where only one fixture may be needed for egress lighting, such as a classroom or stairwell, or in areas where multiple switches are in use
- Lighting load: fluorescent only, 3 A max
- Dual input (120/277V, 60Hz)



GTD20A™

Emergency Lighting Relay Control Device

- Acts as a bypass or transfer device; similar products do not
- Provides multiple wiring and application options, including wiring schemes for line and low voltage dimming
- Is installed in areas where multiple egress fixtures are used and are controlled with a single switch
- Lighting load: fluorescent, incandescent and HID, 20 A max
- Universal input (120-277V, 50/60Hz)



Applications

- Offices
- Schools
- **▶** Hospitals



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Applications

- **▶** Hospitals
- Offices
- Schools

Interim Lighting

During power failures, auxiliary generators can take up to 10 seconds to bring on emergency lighting. Some situations, such as those involving hospitals, cash exchange or heavy machinery, require constant illumination to ensure the safety of people and property. For them, 10 seconds of darkness is unacceptable.

GEN Series fluorescent emergency backup ballasts fill the gap between power failure and generator startup. When normal power fails, they provide immediate, uninterrupted interim illumination via battery backup power. The GEN3 and GEN1 make it possible for occupants to continue their normal routine or, when appropriate, to begin an evacuation without delay.

GEN Series models:

- ▶ Provide high interim illumination
- Are ideal for operating room applications, prison staging areas, cash exchange areas and sensitive manufacturing and heavy machinery areas





GEN1

- Specification Grade
- ▶ 1050-3200 lumens initial light output
- One-lamp operation
- Operates one 17-32 W (2'-4') T8; one 20-40 W (2'-4') T10 or T12; or one 18-55 W (4-pin) long compact
- Provides up to five minutes of interim illumination
- Patented



GEN3

- Specification Grade
- ▶ 4700-7900 lumens initial light output
- Multilamp operation. Designed for use with instant start parallel AC ballasts only.
- Operates two or three 32 W (4')T8s or two 40-55 W (4-pin) long compacts
- Provides up to four minutes of interim illumination
- Patented

A Better Solution to HID Arc Loss

The ARC Keeper® HID Backup Ballast helps eliminate arc loss in metal halide lighting systems. Metal halides are extremely sensitive to AC power interruptions. The ARC Keeper senses a power failure and quickly responds, supporting the lamp arc for up to two minutes. Two minutes is usually enough time for a minor power disturbance to pass or for a backup generator to begin providing power. By catching and maintaining the arc, the ARC Keeper prevents light loss and the need for restrike.

ARC Keeper models:

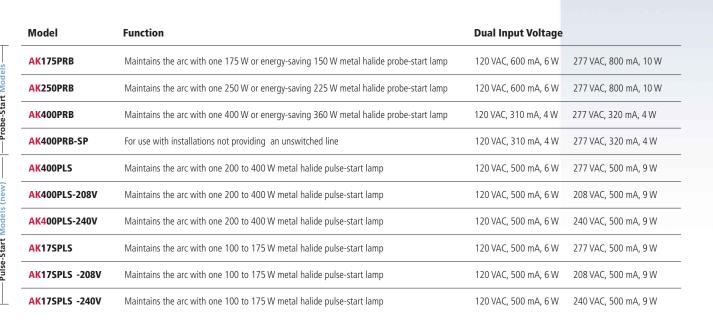
- Reduce lighting downtime in HID metal halide environments, improving safety for people and property
- ▶ Provide a better solution to HID arc loss than do quartz restrike lamps
- ▶ Provide high illumination during transition to generators
- Offer calculable egress lighting based on fixture photometrics
- ▶ Can be remote mounted to provide outdoor egress lighting

Models are available for both probe-start and pulse-start lamps. All are patented and UL Listed for indoor and damp locations. All models are also CSA Certified.









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Applications

- Grocery Stores
- Department Stores
- **)** Gymnasiums
- Warehouses
- **Hangars**
- **▶** Sports Arenas
- **▶** Convention Centers



PRODUCT LINES

LINEA	<u>R</u>
B33	
B30	
B50	
B60	
B70A	
B90	
B100	

COMPACT
B75C
B84CG
B4CFG
BDL94C
B413
B426
B463

GENERATOR GEN3 GEN1 GTDTM GTD20ATM

ALTERNATE	
B50U	
BDL50U	
BDL60U	
B54	
B70A	
B426-2HRS	

SELF-TEST
B30ST
B35ST
B50ST
B50CHIC
B74CST
LP600STU

REMOTE CONTROL
B30RCT
B50RCT
RCT Module
CheckMate™ ET1
LOW-PROFILE

LOW-PROFILE
B50LP
LP600
LP550
LP500
LP400

HID

AK175PRB
AK250PRB
AK400PRB
AK400PRB-SP
AK400PLS
AK400PLS-208V
AK400PLS-240V
AK175PLS
AK175PLS-208V
AK175PLS-240V

CENTRAL BATTERY
CB90-48
CB90
CB80

COLD-PAK®	
B50COLD-PAK®	
B4CF1 COMPACT	
COLD-PAK®	
B4CF2 COMPACT	
COLD-PAK®	

HAZARDOUS
BHD65U
R213H

DAMP
BDL50U
BDL500
BDL60U
BDL600
BDL700
BDL900
BDL94C
BDL426

Many Philips Bodine products, in addition to the BDL line, are rated for damp.