



Emergency Ballasts

Compact Fluorescent

B4CF2 Cold-Pak



Project: \_\_\_\_\_  
Type: \_\_\_\_\_  
Model No: \_\_\_\_\_ Qty: \_\_\_\_\_  
Date: \_\_\_\_\_  
Notes: \_\_\_\_\_

## Extreme Cold Environments Specification Grade One-lamp Emergency Illumination For Damp Locations

Product order number: B4CF2M (galvanized metal case)

### Specifications

**UL LISTED/CSA CERTIFIED**  
Factory or Field Installation  
(Damp)

**Illumination Time**  
90 Minutes

**Initial Light Output**  
Up to 1250 Lumens @25°C

**Full Warranty**  
5 Years (NOT pro-rata)

**Dual Input Voltage**  
120/277 VAC, 60 Hz

**AC Input Current**  
300 mA

**AC Input Power Rating**  
16 Watts

**Test Switch**  
Single Pole

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

**Battery Charging Current**  
220 mA

**Recharge Time**  
24 Hours

**Charging Indicator Light**  
LED

**Temperature Rating (Ambient)**  
-20°C to +55°C (-4°F to +131°F)

**Dimensions**  
9.9" x 2.6" x 1.5"  
(251 mm x 67 mm x 38 mm)  
23" (584 mm) of 1/2" Diam Flex Conduit  
Mounting Center 9.4" (239 mm)

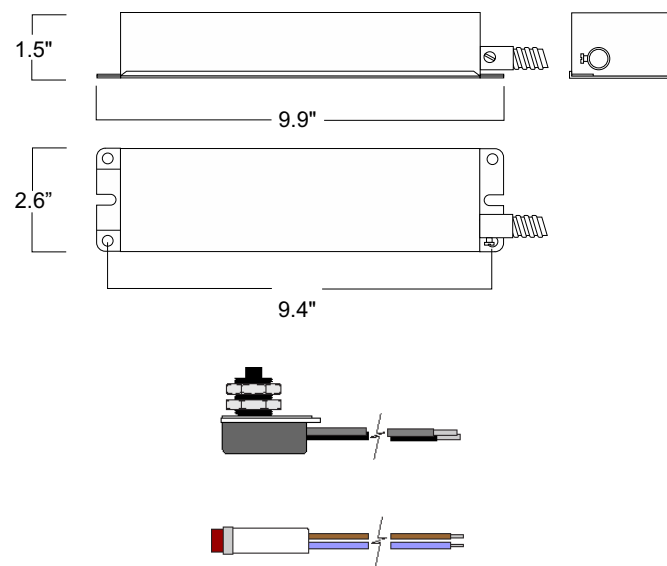
**Weight**  
3.6 lbs. (1.63 kg)

### Benefits:

- Operating range from -20°C to +55°C
- Up to 1250 lumens @ 25°C
- End-of-Lamp-Life Compatible

### Dimensions

9.9" x 2.6" x 1.5" (mounting center - 9.4")



A test switch and charging indicator light is provided.



# B4CF2 Cold-Pak

## Flourescent Emergency Ballast, Extreme Temps, One-Lamp Emergency Illumination

**Table 1** Lamp Compatibility

LAMP	BASE	WATTAGE
TWIN/QUAD/TRIPLE TWIN/ QUADRUPLE TWIN-TUBE COMPACT	4-PIN (G24q, GX24q)	13-42 W
LONG COMPACT	4-PIN (2G11)	18-39 W
T5 CIRCLINE	4-PIN (2GX13)	22-40 W

**Table 2** Initial Lumen Output

LAMP	LUMENS
F42QBX, DULUX T/E 42W	1250
REDUCED MERCURY 42W/4P	850
32W/4P, F32TBX, DULUX T/E 32W	1250
REDUCED MERCURY 32W/4P	1100
PL-T 26W/4P, F26TBX, DULUX T/E 26W	700
PL-T 18W/4P, F18TBX, DULUX T/E 18W	900
PL-T 13W/4P, F13TBX, DULUX T/E 13W	700
PL-L 36W, PHILIPS	1100
F39/36BX, DULUX L 36W	1250
PL-L 24W, F27/24BX, DULUX L 27W	800
PL-L 18W, F18BX, DULUX L 18W	775
FC9T5, FPC22	700
FC12T5, FC12T5/HO, FPC40	1000

### APPLICATION

The B4CF2 Cold-Pak emergency ballast works in conjunction with an AC ballast to convert new or existing fluorescent fixtures into emergency lighting. The emergency ballast consists of a high-temperature nickel-cadmium battery, charger and electronic circuitry in one compact case. The B4CF2 Cold-Pak can be used with one 13 - 42 W twin, quad or triple twin-tube lamp, one 22 - 40 W T5 circline or one 18 - 39 W long compact fluorescent lamp. It is also compatible with most one-, two-, three- and four-lamp electronic, standard, energy-saving and dimming AC ballasts. The B4CF2 Cold-Pak is suitable for indoor and damp 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 call the factory.

### OPERATION

When AC power fails, the B4CF2 Cold-Pak immediately switches to the emergency mode, operating one lamp at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the B4CF2 Cold-Pak either heats the battery or charges it, depending on the unit's ambient temperature. The B4CF2 Cold-Pak, using a patented circuit, delays AC ballast operation for approximately three (3) seconds to prevent false tripping of the AC ballast end-of-lamp-life shutdown circuits.

### INSTALLATION

The B4CF2 Cold-Pak does not affect normal fixture operation. It 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 B4CF2 Cold-Pak may be installed on top of or remote from the fixture and has flexible conduit for ease of installation remote from the fixture. The B4CF2 Cold-Pak may be remotely installed up to half the distance the AC ballast manufacturer recommends removing the AC ballast from the lamp or up to 6 feet, whichever is less. For simple visual inspection of the charging indicator light and easy operational testing, the test/monitor plate can be installed near the fixture.

### EMERGENCY ILLUMINATION

Depending upon the wattage and type of lamp selected, the B4CF2 Cold-Pak produces up to 1250 lumens initial emergency light output (see Table 2) at 25°C. Lumen output is greatly affected by lamp temperature during operation by either the AC or emergency ballast. Please contact factory for specific details.

### SPECIFICATION

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with a Philips Bodine B4CF2 Cold-Pak emergency ballast. The B4CF2 Cold-Pak shall have temperature-control circuitry

to fulfill both low-temperature and high-temperature operation. This emergency ballast shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one 9.9" x 2.6" x 1.5" metal case. A test/monitor plate with a solid-state charging indicator light to monitor the charger and battery, a single-pole test switch and installation hardware shall be provided. The emergency ballast, using a patented circuit, shall delay AC ballast operation for approximately three (3) seconds to prevent false tripping of AC ballast end-of-lamp-life shutdown circuits. The emergency ballast shall be capable of operating one \_\_\_\_\_ fluorescent 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. The storage and operating temperature range for the B4CF2 Cold-Pak shall be -20°C to +55°C. The B4CF2 Cold-Pak shall have 16 Watts of input power and a 19.2 Watt-hour battery capacity and shall exceed emergency standards set forth by the current NEC. The B4CF2 Cold-Pak shall be UL Listed and CSA Certified for installation on top of or remote from the fixture.

### WARRANTY

Model B4CF2 Cold-Pak is warranted for five (5) full years from date of purchase. Please see detailed warranty information on our web site.

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Philips Emergency Lighting  
236 Mt. Pleasant Rd.  
Collierville, TN 38017  
Tech Support: 888.263.4638  
Sales: 800.223.5728

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philips.com/bodine