

B50 Cold-Pak®

Extended-Temperature
EMERGENCY LIGHTING EQUIPMENT

PHILIPS bodine

A Division Of Philips Electronics North America Corporation

**Specification grade;
One- or two-lamp emergency
illumination**

Product Summary

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



Illumination Time
90 Minutes

Initial Light Output
Up to 1200 Lumens @ 25°C

Full Warranty
5 Years (NOT pro-rata)

Dual Input Voltage
120/277 VAC, 60 Hz

AC Input Current
165 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
165 mA

Recharge Time
24 Hours

Charging Indicator Light
LED

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

Dimensions
13.3" x 2.4" x 1.5"
(339 mm x 60 mm x 38 mm)
Mounting Center 12.8" (325 mm)

Weight
3.2 lbs. (1.45 kg)



APPLICATION

The B50Cold-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 red case. The B50Cold-Pak can be used with most 17 - 215 W (2' - 8') T8, T9, T10 or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline and energy-saving. One- or two-lamp operation may be selected (see Table 1). It is also compatible with most one-, two-, three- and four-lamp electronic, standard, energy-saving and dimming AC ballasts. If used in an emergency-only fixture, no AC ballast is necessary. The B50Cold-Pak is suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet 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 B50Cold-Pak immediately switches to the emergency mode, operating either one or two lamps at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the B50Cold-Pak either heats the battery or charges it, depending on the temperature.

INSTALLATION

The B50Cold-Pak does not affect normal fixture operation and 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 B50Cold-Pak may be installed inside the fixture. Contact the manufacturer for installation on top of or remote from the fixture.

UL AND CODE COMPLIANCE

The B50Cold-Pak has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and by the Canadian Standards Association (CSA) in accordance with the standards set forth in C22.2 No. 141, "Unit Equipment for Emergency Lighting." The B50Cold-Pak is UL Listed and CSA Certified 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.

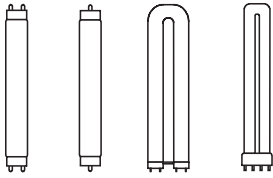
Emergency lighting equipment can be modified to accommodate special voltages, frequencies and longer run times.

Specifiers Reference

Project _____ Type _____ Model No. _____
Comments _____

L2100001

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EMERGENCY ILLUMINATION

Depending upon the number (one or two), wattage and type of lamps selected, the B50Cold-Pak produces up to 1200 lumens initial emergency light output (see Table 2) at 25° C. For lumens at different temperatures for one or two 32W 4' T8 lamps, see Table 3. If two-lamp operation is selected, light output is evenly divided between the lamps for better distribution of emergency illumination.

SPECIFICATION

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with a Philips Bodine B50Cold-Pak emergency ballast. The B50Cold-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 13 3/8" x 2 3/8" x 1 1/2" red metal case. 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 shall be capable of operating [one or two] _____ fluorescent lamp(s) (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 and for sealed & gasketed fixtures, including fixtures rated for wet locations. The storage and operating temperature range for the B50Cold-Pak shall be -20°C to +55°C. The B50Cold-Pak shall have 16 Watts of input power and a 21 Watt-hour battery capacity and shall exceed emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed and CSA Certified for installation inside, on top of or remote from the fixture and shall be warranted for a full five years from date of purchase. Contact the manufacturer for installation on top of or remote from the fixture.

WARRANTY

Model B50Cold-Pak is warranted for five (5) full years from date of purchase. This warranty covers only properly installed Philips Bodine emergency ballast used under normal conditions. For the warranty period, Philips Emergency Lighting will, at its option, repair or replace without charge a defective emergency ballast, provided it is returned to the factory transportation prepaid and our inspection determines it to be defective under 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 emergency lighting equipment.

Table 1 - Lamp Compatibility

LAMP (T8, T10, T12)	BASE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)
1" (T8)	Single or Bipin	17 - 40 W (2' - 4')	1
1 1/8" (T9)			2
1 1/4" (T10)	Single or Bipin	40 - 215 W (5' - 8')	1
1 1/2" (T12)			

Table 2 - Initial Lumen Output

LAMP	LUMENS	
	1 Lamp	2 Lamps
F032, FBO31 T8	1100	1200
F096 T8	1200	
F96T8/HO	1050	
F96T12, HO, VHO	950	
F025, FBO24 T8	1100	1050
F28 2D/4P	1100	1100
F38 2D/4P	1000	1100
F017, FBO16 T8	925	850
F40T12, F40U	950	950
F48T12/HO	1025	

Table 3 - Initial Lumen Output

AMBIENT TEMPERATURE (°C)	LUMENS PROVIDED WITH 32 W 4' T8 LAMP(S)	
	1 LAMP	2 LAMP
25	1100	1175
10	675	705
5	550	635
0	400	505
-5	350	415
-10	Call Factory	260
-15	Call Factory	260
-20	Call Factory	Call Factory

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