

Emergency Ballast

DEB-7LP

Low-Profile Fluorescent,
390-700 Lumens
One T5, T5HO, or T8 Lamp,
Damp Location



Specifier's Reference

| |
|-----------|
| Project |
| Type |
| Model No. |
| Comments |

codes and standards

- UL Listed in accordance with the standards set forth in UL924
- UL Listed for factory installation or field retrofit.
- NFPA 70 (National Electric Code)
- NFPA101 (Life Safety Code)
- UL Listed for damp locations

application

- The DEB-7LP low profile fluorescent emergency ballast works in conjunction with a low-profile or standard-size AC ballast to convert new or existing standard or high-output T5 fluorescent luminaires into unobtrusive emergency lighting. The emergency ballast consists of a high temperature nickel-cadmium battery, charger and electronic circuitry in one compact case. The DEB-7LP can be used with one 14-28V standard or 24-54W high-output T5; one 32W (4'), 40W (5') or 44W HO (4') T8; or one 36-55W 4pin long compact fluorescent lamp (see Table 1). It is also compatible with most one, two, three and four lamp electronic, standard, energysaving and dimming AC ballasts. If used in an emergency-only fixture, no AC ballast is necessary. The DEB-7LP is suitable for indoor and damp locations and for sealed and 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. Recommended applications include: emergency lighting for pendant, cove, recessed indirect/direct, surface mount and architectural lighting commonly used in office, hospitality, healthcare, retail and educational facilities.

operation

- When AC power fails, the DEB-7LP immediately switches to the emergency mode, keeping one lamp illuminated at a high lumen output, then at reduced lumen output for a minimum of 90 minutes. When AC power is restored, the DEB-7LP automatically returns to the charging mode and delays AC ballast operation for five seconds to prevent false tripping of AC ballast (end-of-life) shutdown circuits. The DEB-7LP uses a patent pending circuit to perform this AC ballast delay function. The suggested operating temperature range is 32°F (0°C) to 122°F (50°C).

battery

- Since high temperatures exist in fluorescent luminaires, the DEB-7LP uses a specially constructed, high temperature nickel-cadmium battery. This battery requires no maintenance, and has a life expectancy of 7 to 10 years.

restrictions

- Suitable for indoor and damp locations and for sealed and gasketed fixtures including installation inside of fixtures rated for wet locations. It is not suitable for installation in wet locations, hazardous locations or for air handling air outlet applications.

emergency illumination

- Produces 390 to 700 Lumens initial emergency light output. During emergency illumination, one lamp is illuminated, even if installed with a multi-lamp AC ballast.

installation

- This emergency ballast does not affect normal luminaire operation and may be used with either a switched or unswitched luminaire. If a switched luminaire 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 DEB-7LP may be installed inside, on top of or remote from the luminaire. The emergency ballast may be remote-installed up to half the distance the AC ballast manufacturer recommends removing the AC ballast from the lamp, or up to 50 feet, whichever is less. Installation is not recommended with luminaires where the ambient temperature may fall below 32°F (0°C) for extended periods.

suggested specifications

- Emergency lighting shall be provided by using a standard fluorescent luminaire equipped with a low profile emergency ballast. This emergency ballast shall delay AC ballast operation for five seconds to prevent false-tripping of AC ballast end-of-life shutdown circuits (using a patent-pending circuit), and consist of a high-temperature, maintenance free nickel cadmium battery, charger and electronic circuitry contained in one 18.5"x1.18"x1.18" galvanized steel 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 _____ fluorescent lamp at _____ Lumens (see Table 1) initial light output in the emergency mode for a minimum of 90 minutes. This emergency ballast shall have 2.6 Watts of input power, 13.2 Watt hour battery capacity, and comply with emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed for installation inside, on top of, or remote from the luminaire, warranted for a full five years from date of purchase.

electrical

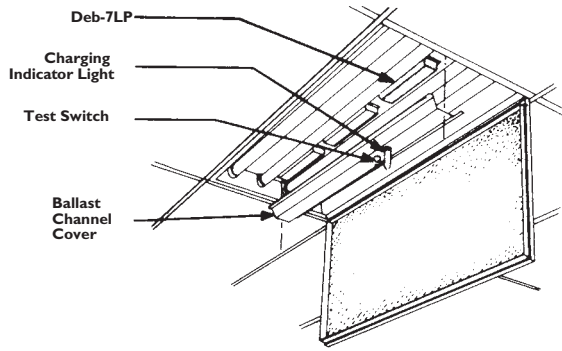
- Dual input voltage 120/277
- Electrical rating – 2.6 Watts
- AC input current – 190 mA
- Recharge time – 24 hours
- Test switch provided – LED
- Charging indicator light provided – LED
- Ballast case dimensions – 18.5"x1.18"x1.18"
- Battery charging current – 165mA
- Weight – 2.3 lbs.

warranty

- Five year warranty on unit from date of purchase.

Ordering Information

For factory installed **DEB-7LP** use a suffix number **-E7LP** with luminaire catalog number.



dimensions

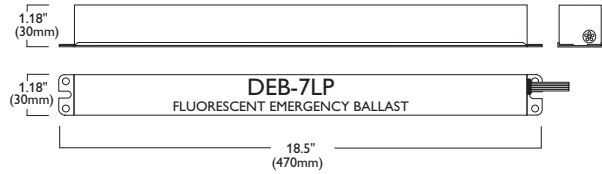


Table 1 - Lamp Compatibility

| Lamp | Base | Wattage (Length) | No. of Lamps (Emergency) |
|--------------|-----------------|------------------|--------------------------|
| T5/HO | Miniature Bipin | 24-54W (2'-4') | 1 |
| T5 | Miniature Bipin | 14-28W (2'-4') | 1 |
| Long Compact | 4-PIN (2G11) | 36-55W | 1 |
| T8 | Bipin | 32W (4') | 1 |
| | | 40W (5') | 1 |
| T8/HO | Bipin | 44W (4') | 1 |

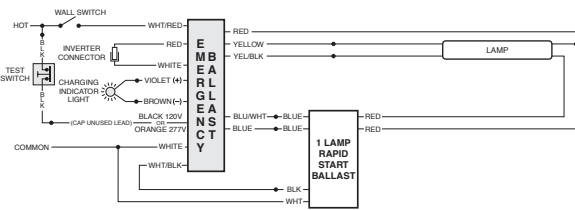
Table 2 - Initial Lumen Output

| Lamp | Lumens |
|---------------------------------|---------------|
| | 1 Lamp |
| FP54, F54T5/HO | 700* |
| FP39, F39T5/HO | 620* |
| FP24, F24T5/HO | 390* |
| FP28, F28T5 | 700* |
| FP21, F21T5 | 620* |
| FP14, F14T5 | 430* |
| F32T8 (4') | 635 |
| F40T8 (5') | 570 |
| F48T8/HO (4') (44 W) | 470 |
| PL-L 50W, F50BX/RS, Dulux L 55W | 510 |
| PL-L 40W, F40/30BX, Dulux L 40W | 625 |
| PL-L 36W, F39/36BX, Dulux L 36W | 610 |
| FC12T5, FC12T5/HO, FPC40 | 1000 |
| PL-L 36W, F39/36BX, FT36DL | 900 |

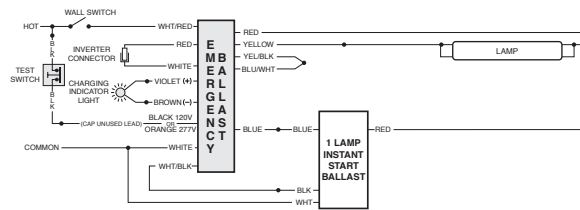
Partial listing of lamps operated

wiring diagrams

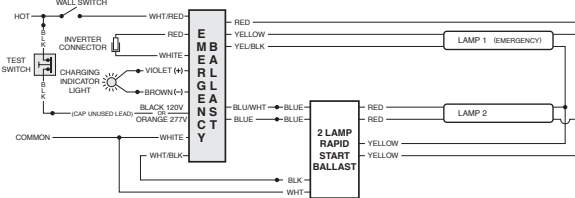
One (1) Lamp Rapid Start Ballast



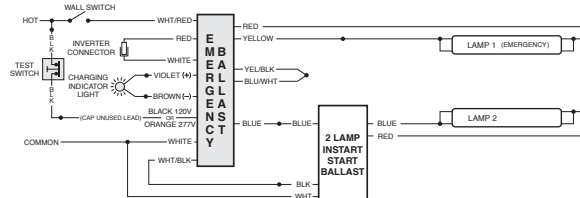
One (1) Lamp Instant Start Ballast



Two (2) Lamp Rapid Start Ballast



Two (2) Lamp Instant Start Ballast



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