

Emergency Ballast

DEB-5W
Fluorescent, 1100-1400 Lumens
One or Two 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
- NFPA 70 (National Electric Code)
- NFPA101 (Life Safety Code)
- UL listed for use in damp locations.

application

- The DEB-5W Series provides 90 minutes of emergency illumination by utilizing existing fluorescent lighting, and produces up to 1400 lumens initial emergency light output. The DEB-5W can be used with most 17W through 215W (2'-8") T8, T9, T10 or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline, energy saving, and 4 pin twin quad, and triple twin-tube compacts. One or two lamp operation may be selected. It is also compatible with standard, energy saving, dimming and electronic AC ballasts. The DEB-5W Series is a dual voltage device rated for use on 120 through 277 volt 50/60-Hertz circuit. The appropriate line lead (black for 120V or orange for 277V) will be selected and the unused lead will be capped. Since the DEB-5W Series senses when power is lost, an un-switched power source must be provided to the luminaire. If used in an emergency only luminaire, no AC ballast is necessary.

operation

- Normal lamp lumen output is provided by the lamp when DEB-5W Series is not in the emergency mode. When AC power fails, the DEB-5W Series automatically switches to the emergency mode, keeping one or two lamps illuminated at reduced output for a minimum of 90 minutes. When factory installed it will be wired for two lamp emergency operation when possible. When AC power is restored, the DEB-5W Series automatically returns to the charging mode and, using a patented circuit, delays AC ballast operation for approximately 3 seconds to prevent false tripping of the AC ballast end-of-lamp-life shutdown circuits.

battery

- DEB-5W uses a high temperature nickel cadmium battery. This battery requires no maintenance and has a life expectancy of 7 to 10 years. The suggested operating temperature range is 32°F (0°C) to 122°F (50°C).

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

- The DEB-5W Series produces up to 1400 lumens (depending on the type of lamp) initial emergency light output.

installation

- The DEB-5W Series does not affect normal luminaire operation. It requires an unswitched source of power; therefore, in switched luminaires, an unswitched source of power must be provided (see wiring diagram). Installation is not recommended in luminaires where the ambient ballast channel temperature may fall below 0°C (32°F) for extended periods. Before installing the DEB-5W Series, make sure that the necessary branch circuit wiring is available. The DEB-5W Series requires an unswitched source of power and must be fed from the same branch circuit as the AC ballast; therefore, in switched luminaires the DEB-5W Series must be connected ahead of any local switching (see wiring diagram). Installation instructions (including internal wiring diagrams for retrofit installation) are supplied with each ballast. To prevent high voltage from being present on the DEB-5W Series output leads (red and yellow), do not join the battery connector until installation is complete and AC power is supplied to the DEB-5W Series.

suggested specifications

- Emergency lighting shall be provided by using a standard luminaire equipped with a DEB-5W emergency ballast. This emergency ballast shall consist of a high temperature, maintenance-free nickel cadmium battery, charger and electronic circuitry contained in one 13.3"x 2.4"x1.5" black 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, using a patented circuit, shall delay AC ballast operation for approximately three seconds to prevent false tripping of AC ballast end-of-lamp-life shutdown circuits. The emergency ballast shall be capable of operating (one or two) fluorescent lamps(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 DEB-5W shall have 4 watts of input power and a 24 watt-hour battery capacity and shall exceed emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed for installations inside, on top of or remote from the fixture.

electrical

- Dual input voltage 120/277VAC, 50 or 60Hz
- Electrical rating – 4.0 Watts
- AC input current – 280 mA
- Recharge time – 24 hours
- Test switch provided
- Charging indicator light provided – LED
- Ballast case dimensions – 13.3"x2.4"x1.5"
- Weight – 3.5 lbs.

warranty

- Five year warranty on unit from date of purchase.

Ordering Information

DEB-5W – 1400 lumen max output emergency ballast with damp location listing.
For factory installed **DEB-5W** use a suffix number **-E5** with luminaire catalog number.

Accessories (Order Separately)

MCCAPS – Wire Bundle Kit for External Mounting
PL-SP – Single Pole Remote Test Switch

dimensions

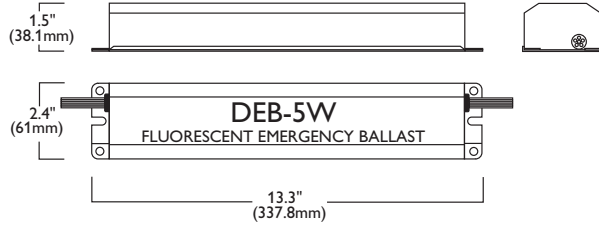
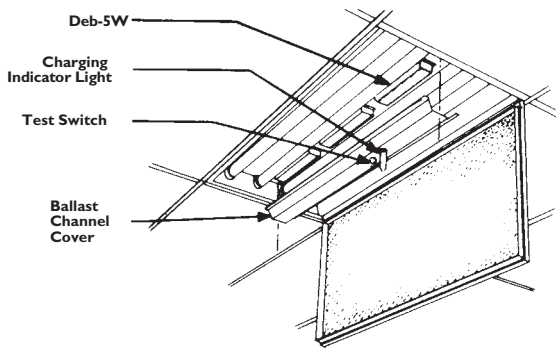


Table 1 - Lamp Compatibility

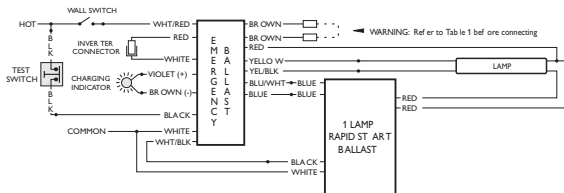
Lamp (T8, T9, T10, T12)	Base	Wattage (Length)	No. of Lamps (Emergency)
1", 1-1/4", 1-1/2"	Single or Bipin	17-40W (2'-4')	1
		40-215W (5'-8')	2
Long Compact	4-PIN (2G11)	18-55W	1

Table 2 - Initial Lumen Output

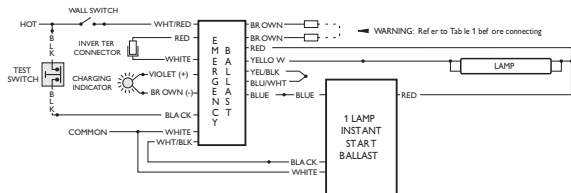
Lamp	Lumens	
	1 Lamp	2 Lamps
FO25, FBO24 T8	1250	1100
FO32, FBO31 T8	1350	1350
FO96 T8	1400	
FO17, FBO16	1050	950
F40 T12, F40/U	1100	1100
F48 T12/HO	1200	
F96 T12, HO,VHO	1100	
F39/36BX, PL-L 36W Dulux L 39W	1100	1100
F28 2D/4P	1100	1100
F38 2D/4P	1000	1000
F27/24BX, PL-L 24W, Dulux L 27W		1000
F40T12/ES (34W)	975	975
PL-L 40W, F40/30BX, F50BX, PL-L 50W, DULUX L 55W	900	

wiring diagrams

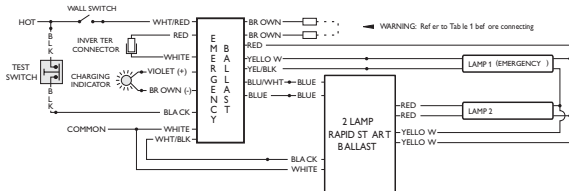
One (1) Lamp Rapid Start Ballast



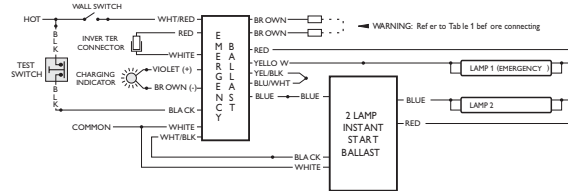
One (1) Lamp Instant Start Ballast



Two (2) Lamp Rapid Start Ballast



Two (2) Lamp Instant Start Ballast



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