EDWARDS SIGNALING

Installation Instructions for 106EX Series AdaptaBeacon[®] Strobe Light for Use in Hazardous Locations

Description

The 106EX Series AdaptaBeacon strobe signaling appliances are intended for general utility signaling use. The strobes are UL and cUL listed for use in Class I, Division 1, Group C and D, Class I, Division 2, Group A, B, C and D, Class II, Division 1, Group E, F and G, Class II, Division 2, Group F and G, and Class III Division 1 and 2 hazardous locations with operating temperature codes per following chart.

Operating Temperature Codes

| | | | Class II, Div. 2, Groups F, G; Class III, Div. 2 |
|------------------|--------------------------------------|--------------------------------|---|
| Ambient Temp. | Class I, Div. 2 Groups A, B, C, D | Class I, Div. 1 Groups C, D | Class II, Div. 1, Groups E, F, G; Class III, Div. 1 |
| 40°C | 260°C (T2B) | 85°C (T6) | 120°C (T4A) |
| 55°C | 280°C (T2A) | 85°C (T6) | 135°C (T4) |
| 65°C | 280°C (T2A) | 85°C (T6) | 135°C (T4) |

The strobes are UL and cUL Listed, as Type 3R and 4X enclosures. Additionally, the 120V AC, 240V AC and 250V DC strobes are UL and cUL listed as Marine enclosures.

The strobe flashes a 360-degree beam of light approximately 65 times per minute.

The strobes are available in pendant, bracket or ceiling mount models and in 120V 60 Hz, 240V 60 Hz, 12-48V DC and 250V DC.

Installation

WARNING

To reduce the risks of ignition of hazardous atmospheres and shock, do not apply power to the unit until installation has been completed and unit is tightly assembled and secured.

Install this unit in accordance with the applicable requirements in the latest edition of the National Electrical Code and Canadian Electrical Code.

- 1. Mount using the following applicable method.
 - a. **Pendant Mount Models** (Figures 1 and 4): Unscrew the globe assembly from the mounting hood and set aside. Install explosion-proof hanger box (not supplied). Secure 3/4" (19 mm) NPT threaded conduit (not supplied) to the box. Install the hood on the conduit. Proceed to step 2.
 - b. **Ceiling Mount Models** (Figures 2 and 4): Unscrew the globe assembly from the ceiling mount box. Mount the ceiling box using appropriate hardware (not supplied) suitable for the mounting surface. Proceed to step 2.

- c. **Bracket Mount Models** (Figures 3 and 4): Unscrew the globe assembly from the wall bracket. Install the mounting bracket using appropriate hardware (not supplied) for the mounting surface. Pull the field wiring through the mounting bracket. Proceed to step 2.
- 2. Extend the required power source wiring down through the mounting hood. See Table 2 for required supply wire temperature ratings.
- 3. Refer to Figure 4. Loosen the (2) screws holding the circuit block in place. Rotate and remove the circuit block.
- 4. Connect field earth ground wire to ground screw (Figure 4) or earth ground via conduit system.
- 5. Connect the positive (+) wire to the gold colored terminal and the negative (-) wire to the silver colored terminal.
- 6. Replace circuit block and tighten two screws to hold in place.
- 7. Install the fixture on the mounting hood, bracket or box as applicable.

WARNING

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To reduce the risk of ignition of hazardous atmospheres and shock, keep assembly tightly closed when circuits are energized.

8. Apply power to the unit and ensure proper function.

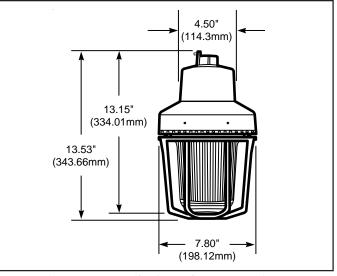


Figure 1. Detail of Pendant Mounting

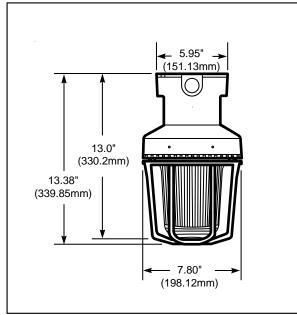


Figure 2. Detail of Ceiling Mounting

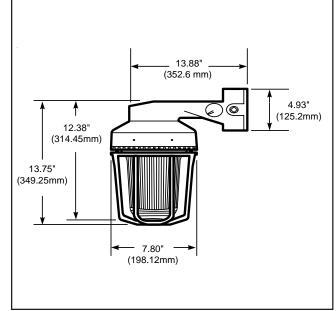


Figure 3. Detail of Bracket Mounting

Maintenance

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Disassemble the unit as follows (Figure 5):

WARNING

To reduce the risk of ignition of hazardous atmospheres and shock, keep assembly tightly closed when circuits are energized.

To reduce the risk of ignition of hazardous atmospheres and shock, disconnect from the supply and circuit and allow five (5) minutes for stored energy to dissipate before disassembling the unit.

- 1. Loosen the (3) guard screws and remove the guard.
- 2. Loosen the globe and ring assembly set screw. Insert a suitable tool into the notches in the globe and ring assembly and loosen the assembly by prying in a

counterclockwise direction. Remove the ring and globe assembly.

- 3. Refer to Table 1 for the correct replacement catalog number and replace the necessary part.
- 4. To replace, simply screw the unit on until it seats firmly onto its gasket. Tighten the unit another 1/8 to 1/4 turn. Tighten the setscrew.
- 5. Reinstall the guard, where applicable, and secure using the three supplied screws.
- 6. After the unit is assembled, apply power and make sure the unit functions properly.

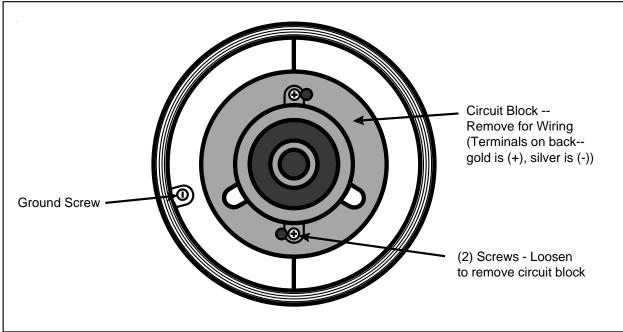


Figure 4. Wiring the AdaptaBeacon

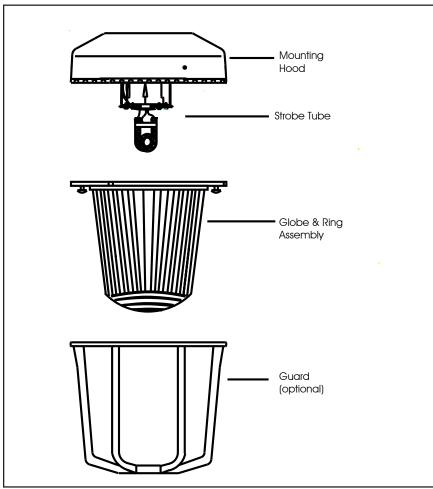


Figure 5. Disassembly of the 106EX Series Adaptabeacons

| Catalog Number | Mounting Method | Electrical Ratings | Conduit Size | Flash Rate | Strobe Tube Replacement |
|----------------|--------------------|-----------------------|-----------------|---------------|----------------------------|
| 106EXPST*-N5 | Pendant | 120V 60 Hz | 3/4" NPT | Approx. | 92-ST |
| 106EXBST*-N5 | Bracket | 0.1A | | 65 fpm | |
| 106EXCST*-N5 | Ceiling | | | | |
| 106EXPST*-R5 | Pendant | 240V 60 Hz | 3/4" NPT | Approx. | 92-ST |
| 106EXBST*-R5 | Bracket | 0.05A | | 65 fpm | |
| 106EXCST*-R5 | Ceiling | | | | |
| 106EXPST*-EK | Pendant | 12 - 48V DC | 3/4" NPT | Approx. | 92-ST |
| 106EXBST*-EK | Bracket | 1.2 - 0.38A | | 65 fpm | |
| 106EXCST*-EK | Ceiling | | | | |
| 106EXPST*-S1 | Pendant | 250V DC | 3/4" NPT | Approx. | 92-ST |
| 106EXBST*-S1 | Bracket | 0.1A | | 65 fpm | |
| 106EXCST*-S1 | Ceiling | | | | |

Table 1. 106EX Series AdaptaBeacon Strobes

*Letter in this position denotes color of the globe: A - amber, B - blue, C - clear, G - green, R - red or M - magenta

| Table 2. Supply Wire Temperature Markings | | | | |
|---|------------------------------------|--|--|--|
| Ambient Temperature | Supply Wire Temperature Marking | | | |
| 40°C | 75°C | | | |
| 55°C | 90°C | | | |
| 65°C | 105°C | | | |

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