edwards® SIGNALING

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Installation Instructions for Catalog Series 48 AdaptaBeacon® Signals

Specifications

Catalog Number	Electrical Rating	Lamp Ratings
48SIN(*)-E1	12V DC 1.0A	188 Lumens† 1,520 hr.‡
48SIN(*)-G1-20WH	24V DC 0.80A	226 Lumens† 20,000 hr.‡
48SIN(*)-G5-20WH	24V 50/60 Hz 0.80A	226 Lumens† 20,000 hr.‡
48SIN(*)-N5-25WH	120V 50/60 Hz 0.20A	175 Lumens† 20,000 hr.‡
48SLED(**)-G1	24V DC 0.062A	100,000 hr.‡
48SLED(**)-N5	120V 50/60 Hz 0.022A	100,000 hr.‡
48FIN(*)-E1	12V DC 1.0A	188 Lumens† 1,520 hr.‡
48FIN(*)-G1-20WH	24V DC 0.80A	226 Lumens† 25,000 hr.‡
48FIN(*)-G5-20WH	24V 50/60 Hz 0.80A	226 Lumens† 25,000 hr.‡
48FIN(*)-N5-25WH	120V 50/60 Hz 0.20A	175 Lumens† 25,000 hr.‡
48FLED(**)-G1	24V DC 0.062A	100,000 hr.‡
48FLED(**)-N5	120V 50/60 Hz 0.022A	100,000 hr.‡

*Specify color of lens by adding one of the following letters to the cat. number: A-amber, B-blue, C-clear, G-green, M-magenta, or R-red.
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†Bulb manufacturer's Lumen rating.
‡Projected lamp life based on manufacturer's calculated lamp life at 65 fpm and 50% duty cycle.

Description

The Catalog Series 48 Adaptabeacon signal is a UL and cUL listed signaling appliance in a NEMA 4X enclosure. The signals are suitable for indoor or outdoor (weatherproof) installation and are available in AC and DC models as listed above.
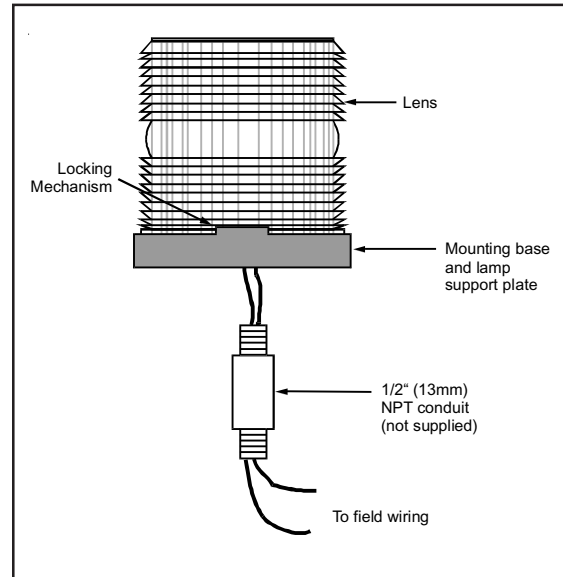

Figure 1. Conduit Mounting

Edwards halogen models, 48SIN and 48FIN, are designed for use where increased light output is required. The 20 watt halogen bulbs are rated by the manufacturer at 226 lumens. The 25 watt halogen bulbs are rated at 175 lumens.

Edwards 48FLED long life, flashing LED models are effective in high noise level areas, especially where ear protection must be worn and a visual status indicator is required. Edwards 48SLED long life, steady-on LED models are suited for light duty applications where a continuous steady-on status indicator is required and where ambient noise makes audible signals difficult to hear.

The 48 series signals can be mounted on 1/2" (13mm) NPT conduit (indoor or outdoor) or direct surface mounted (indoor). For outdoor (weatherproof) installation, the signals _must_ be conduit mounted with their lens facing directly up. When installing indoors, these signals can be mounted in any position.

PLC Compatibility

The electrical input load requirements for PLC compatible signaling devices are listed in Table 1. Signaling devices may be directly connected to output cards that meet these requirements.

Table 1. PLC Compatibility

Cat. No.	Operating voltage*	Maximum off state leakage current (mA)	Continuous on current (mA)	Surge (inrush/duration) (A/ms**)
48SIN( )-G1-20WH	24V DC	25	800	0.9/1
48SIN( )-N5-25WH	120V AC	25	200	0.8/8
48SLED( )-G1	24V DC	4	65	0.07/1
48SLED( )-N5	120V AC	5	25	0.09/8
48FIN( )-G1-20WH	24V DC	25	800	2.2/100
48FIN( )-N5-25WH	120V AC	25	200	1.3/8
48FLED( )-G1	24V DC	4	65	0.07/1
48FLED( )-N5	120V AC	5	25	0.09/8

*All AC volts at 60 Hz
**Amps/milliseconds

Installation

Install in accordance with the latest edition of the *National Electrical Code* and local regulations. Install the signals using one of the following applicable mounting procedures.

Conduit Mounting (Indoor or Outdoor) - Figure 1

1. Route the signal's wire leads through 1/2" (13mm) NPT conduit (not supplied) and thread the conduit into the signal mounting base.

2. Connect the field wiring to the signal wire leads as described in the Wiring Section.
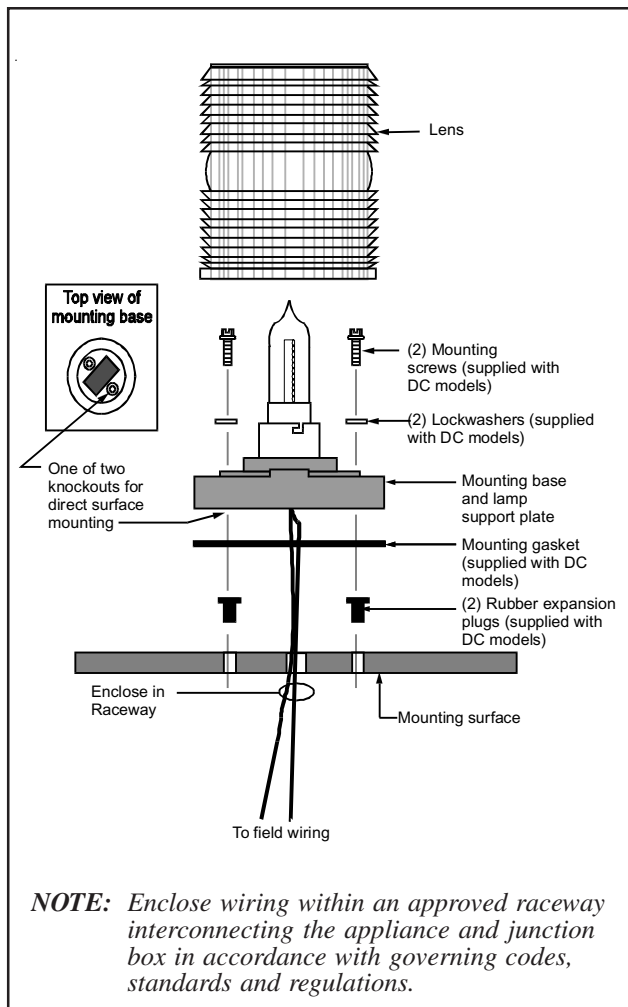

Top view of mounting base

Lens

(2) Mounting screws (supplied with DC models)

(2) Lockwashers (supplied with DC models)

One of two knockouts for direct surface mounting

Mounting base and lamp support plate

Mounting gasket (supplied with DC models)

(2) Rubber expansion plugs (supplied with DC models)

Enclose in Raceway

Mounting surface

To field wiring

NOTE: Enclose wiring within an approved raceway interconnecting the appliance and junction box in accordance with governing codes, standards and regulations.

Figure 2. Direct Surface Mounting of the 48 Series Signals

Direct Surface Mounting (Indoor Only) - Figure 2

NOTE: AC signals may be direct surface mounted but are not supplied with a direct surface mounting kit. The installer should use suitable hardware appropriate for the installation.

1. Insert a small flat blade screwdriver between the locking mechanism and the lens. Gently push down and then pry up, unseating the lens. Pull the lens up and off of the signal mounting base, being careful not to damage the lamp.

2. Remove the two knockouts for mounting screws from the signal base. Place the 3-3/4" (95mm) mounting gasket provided in the direct surface mounting kit (DC models only) on the mounting surface and mark the center of the three holes in the gasket on the mounting surface. Remove the gasket and drill a 3/8" (10mm) hole at each of the marked positions.

3. Install the two rubber expansion plugs provided in the hardware kit (DC models only) into the two outer holes in the mounting surface.

4. Route the wire leads from the signal base through the center hole in both the mounting gasket and surface. The wiring should be run through an approved raceway or conduit connected between the bottom of the signal base and an approved junction box (not supplied). Bring wire leads into the junction box. Refer to the signal's label for voltage rating.

5. Align the outer holes in the mounting gasket with the holes in the surface. Insert two screws with lockwashers through the two outer holes in the signal base and align the screws with the rubber expansion plugs as shown in Figure 2. Press the signal base firmly against the mounting surface and tighten the screws.

6. Connect the field wiring to the signal wire leads as described in the Wiring Section.

Wiring

1. For AC models, use wire nuts (not supplied) and connect the signal's black and white wire leads to the power source wires. Polarity is not important.

2. For DC models, connect the signal's red wire to the positive power source wire and connect the signal's black wire to the negative power source using appropriate connectors (not supplied). Polarity must be observed.

Troubleshooting

If the signal light fails to operate, make sure there is power to the signal. If there is power and the light still fails to operate, replace the lamp as directed in the "lamp replacement" section.

Maintenance

Cleaning

Periodically clean the Adaptabeacon lens surface with a soft cloth or sponge and water or a mild detergent solution to maintain op-

timum light visibility. Ensure that the lens is completely dry before assembling the signal.

Lamp Replacement (non-LED models only)

Refer to the "Replacement Parts" section, for the required type of lamp. After disconnecting power, replace the lamp as follows:

Refer to Figure 3.

1. Insert a small flat blade screwdriver between the locking mechanism and the lens. Gently push down and then pry up, unseating the lens. Pull the lens up and off of the signal mounting base.

2. Gently push down on the lamp, twist and pull up to remove the lamp from its socket. Install the new lamp by aligning the connector on the base of the tube with its mating socket, then carefully press down into the socket. Assemble the signal.

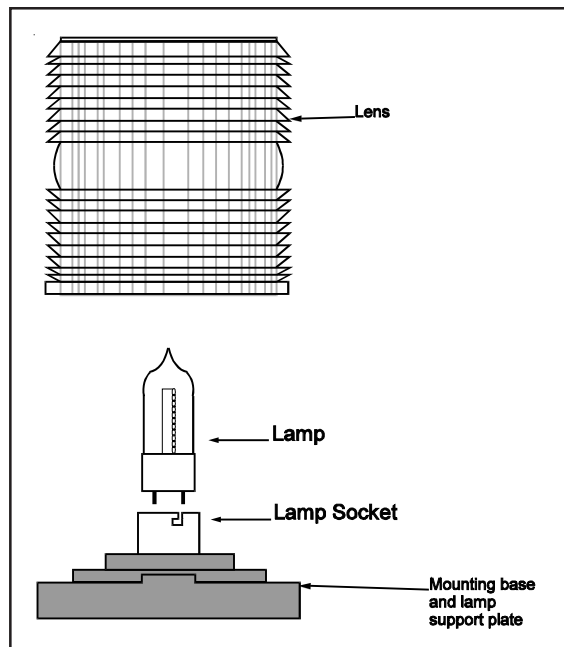3. Apply power to the signal and verify that the signal operates properly.

Figure 3. Lamp Replacement

Replacement Parts

Component	Catalog or Part Number
Halogen Lamp - 48SIN(*)-N5-25WH, 48FIN(*)-N5-25WH	50LMP-25WH or Industry Trade No. 15T7DC**
Halogen Lamp - 48SIN(*)-G1-20WH, 48SIN(*)-G5-20WH, 48FIN(*)-G1-20WH, 48FIN(*)-G5-20WH	50LMP-20WH or Industry Trade No. 1692**
Incandescent Lamp - 48SIN(*)-E1, 48FIN(*)-E1	Industry Trade No. 94
Lens (Amber, Blue, Clear, Green, Magenta or Red) - 48FIN and 48SIN Series	96-L(*)
Lens (Amber, Blue, Green, Red) - 48FLED and 48SLED Series	96-L(*)

*Specify color of lens by adding one of the following letters to the catalog number: A-amber, B-blue, C-clear, G-green, M-magenta, or R-red. Example: A red lens for the 48SIN series signal is 96-LR.

**The non-halogen bulb listed may be used in the halogen bulb models.