EDWARDS® SIGNALING

Installation Instructions for Machlight™ Machine Status Indicator

Description

The Edwards Machlight™ Machine Status Indicator is a multi-device that contains three light modules (red, amber, and green) in a single tower.

The unit is UL and cUL listed for Industrial Control indoor applications (UL 508).

The unit's optically designed lenses are vertically fluted and easily removed in order to facilitate relamping or to resequence the stack colors.

The unit is available in either a surface or pole mount version in 24VAC/DC or 120VAC. Each version is available as a steady or flashing model. All models have flying leads for connecting field wiring. See Table 1 for specifications and Table 2 for product descriptions.

PLC Compatibility

The electrical input characteristics for PLC compatible signals are listed in Table 3. Signals with these characteristics may be directly connected to PLC output cards that do not exceed these input characteristics.

Installation

Installation must be in accordance with the latest edition of the National Electrical Code and other governing standards and codes for standard installation.

1. For direct surface mount versions perform the following:
   a. Using Figure 1 as a guide, mark the three mounting holes and the center wiring clearance hole on the mounting surface.
   b. Drill the three mounting holes and the the wiring clearance hole in the mounting surface.

WARNINGS

To prevent electrical shock, do not connect power until instructed to do so.

To prevent abrasion of wiring insulation, ensure that wire clearance hole is adequately protected.

   c. Feed the unit's wiring through the wiring clearance hole and, using the screws and nuts supplied, attach the unit to the mounting surface.
2. For pole mount versions perform the following:
   a. To mount the unit to the side of a machine, remove the bottom mounting nut, washer and mounting bracket. Use the mounting bracket as a guide to drill two holes in the mounting surface. Secure the mounting bracket to the machine using appropriate hardware (not supplied). Reattach the signal to the mounting bracket using the removed mounting nut and washer.
   c. To mount the unit to the top of a machine, drill a 1/2" (13mm) hole in the mouting surface. Remove the bottom mounting nut, washer and mounting bracket and feed the unit's wiring through the mounting hole. Fasten the pole to the surface using the removed mounting nut and washer.
3. Using wiring nuts connect field wiring to the unit as follows.
   a. Connect the black lead marked with the red tag to the appropriate field wire positive DC or AC hot lead.
   b. Connect the black lead marked with the orange tag to the appropriate field wire positive DC or AC hot lead.
   c. Connect the black lead marked with the green tag to the appropriate field wire positive DC or AC hot lead.
   d. Connect the white lead to the field negative DC or AC neutral lead.
   e. Connect the unit's green with yellow stripe ground lead to field ground.
4. Apply power to the unit and verify proper operation.

Maintenance

WARNING

To prevent electrical shock, disconnect power to the unit.

Bulb Replacement

1. Loosen the screw on the units top cap and remove the top cap.
2. Remove the lens assemblies until the affected bulb is reached.
3. Remove the bulb by pushing down slightly and turning counterclockwise.
4. Replace the bulb.
5. Reassemble the removed lens assemblies in desired order. Note the orientation of the top cap upon reassembly. Ensure recessed areas are positioned to provide clearance from top posts.
6. Reattach the top cap by securing the top cap screw.

Cleaning

The lens surfaces should be periodically dusted and cleaned with a dry soft clean cloth to maintain optimum light visibility. If necessary, the outside of the lens may be cleaned with water and a mild detergent on a well rung-out, soft, clean cloth.

Table 1. Specifications

Catalog No.	Electrical Ratings	Manufacturers Lamp Ratings	Replacement Lamp	Lamp Life
113SP-RGA-AQ	24V AC 50/60 Hz / 24V DC, 0.24A	5 Watts	Ind. Trade 301	500 Hours
113SP-RGA-N5	120V AC 50/60 Hz, 0.062A	10 Watts	113LMP-10W	1,000 Hours
113FP-RGA-AQ	24V AC 50/60 Hz / 24V DC, 0.24A	5 Watts	Ind. Trade 301	500 Hours
113FP-RGA-N5	120V AC 50/60 Hz, 0.062A	10 Watts	113LMP-10W	1,000 Hours
113SS-RGA-AQ	24V AC 50/60 Hz / 24V DC, 0.24A	5 Watts	Ind. Trade 301	500 Hours
113SS-RGA-N5	120V AC 50/60 Hz, 0.062A	10 Watts	113LMP-10W	1,000 Hours
113FS-RGA-AQ	24V AC 50/60 Hz / 24V DC, 0.24A	5 Watts	Ind. Trade 301	500 Hours
113FS-RGA-N5	120V AC 50/60 Hz, 0.062A	10 Watts	113LMP-10W	1,000 Hours

Table 2. Descriptions

Catalog No.	
113SP-RGA-AQ	Steady-on Light Sources. Pole Mount. 24V AC/DC. Red, Green and Amber Lenses.
113SP-RGA-N5	Steady-on Light Sources. Pole Mount. 120V AC. Red, Green and Amber Lenses.
113FP-RGA-AQ	Flashing Light Sources. Pole Mount. 24 AC/DC. Red, Green and Amber Lenses.
113FP-RGA-N5	Flashing Light Sources. Pole Mount. 120v AC. Red, Green and Amber Lenses.
113SS-RGA-AQ	Steady-on Light Sources. Surface Mount. 24V AC/DC. Red, Green and Amber Lenses.
113SS-RGA-N5	Steady-on Light Sources. Surface Mount. 120V AC. Red, Green and Amber Lenses.
113FS-RGA-AQ	Flashing Light Sources. Surface Mount. 24 AC/DC. Red, Green and Amber Lenses.
113FS-RGA-N5	Flashing Light Sources. Surface Mount. 120 AC. Red, Green and Amber Lenses.

Table 3. PLC Compatibility

Cat. No.	Operating voltage*	Maximum off state leakage current (mA)	Continuous on current (mA)	Surge (inrush/duration) (A/ms**)
113SP-RGA-AQ	24V AC/DC	0.1	0.24	2.5 / 5
113SP-RGA-N5	120V AC	0.025	0.08	0.5 / 5
113FP-RGA-AQ	24V AC/DC	0.1	0.24	2.5 / 5
113FP-RGA-N5	120V AC	0.025	0.08	0.5 / 5
113SS-RGA-AQ	24V AC/DC	0.1	0.24	2.5 / 5
113SS-RGA-N5	120V AC	0.025	0.08	0.5 / 5
113FS-RGA-AQ	24V DC	0.1	0.24	2.5 / 5
113FS-RGA-N5	120V AC	0.025	0.08	0.5 / 5

*All AC volts at 50/60 Hz
**Amps/milliseconds

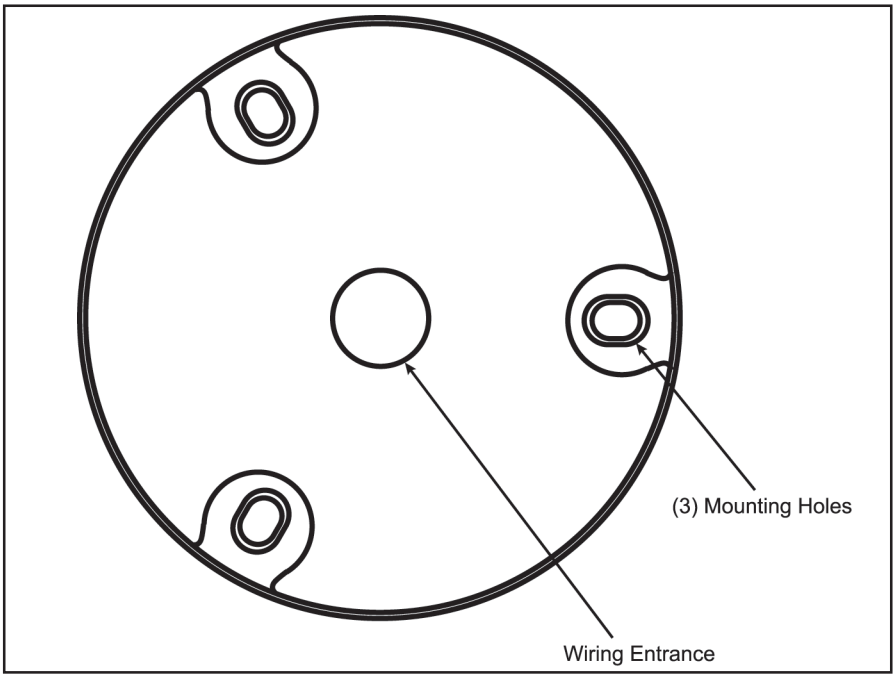

Figure 1. Surface Mount Template