

Photoelectric Control (PEC)

Locking Type Photocontrols - Delayed
Response Thermal Series



Meets FAA/FCC requirements for
airway obstruction lighting

FEATURES / BENEFITS

- ▲ One year warranty
- ▲ Built-in time delay prevents false cycling caused by lightning flashes or stray headlights
- ▲ Available in 120 VAC and 230 VAC
- ▲ Photocell: 1-inch cadmium sulphide light sensitive element
- ▲ Turn-on/Turn off: 35 foot candles turn-on; 58 foot candles turn-off
- ▲ Time delay: Minimum 15 seconds
- ▲ Rated Life: 5000 operations minimum at rated load
- ▲ Power consumption: 1.1 watts average at 120 VAC
- ▲ Dimensions: 3.07" diameter, 2.15" high

Ordering Information

P/N	Description	Voltage
18001-007	Locking-Type Photoelectric Contol	120VAC
18002-007	Locking-Type Photoelectric Contol	230VAC
8506-001	Receptacle (Socket)	N/A

APPLICATION

- ▲ This range of Photocells can be used to control single or multiple obstruction lights or beacons. The controller is designed to be used for ON at dusk, OFF at dawn operation of tower and obstruction lightning in aviation service. Light Actuation Levels (Factory Calibrated) are energised at 35fc and below, and de-energised above 60fc.

OPERATING CONDITIONS

- ▲ Temperature: -40°F to 170°F

FINISH

- ▲ UV stabilised high-impact polypropylene

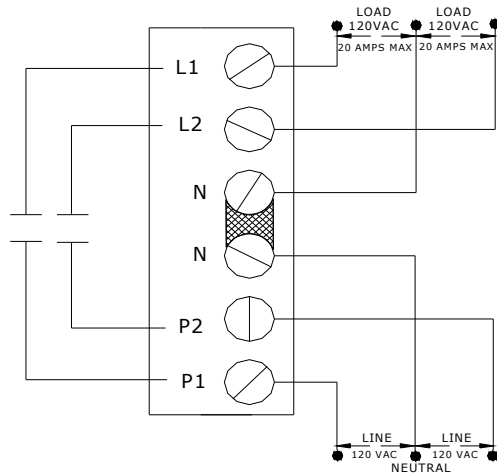
Receptacles for Locking-Type Photocontrols

With all weather locking type receptacle and Lexan® housing.
With 14 inch 14 AAWG wire colour-coded as follows: line - black, neutral- white, load - red. Threaded stem fits through a 1/2 inch knockout.
Dimensions: 2-5/8" diameter (socket), 2-5/8" high (including stem). 1/2" at bottom fitting

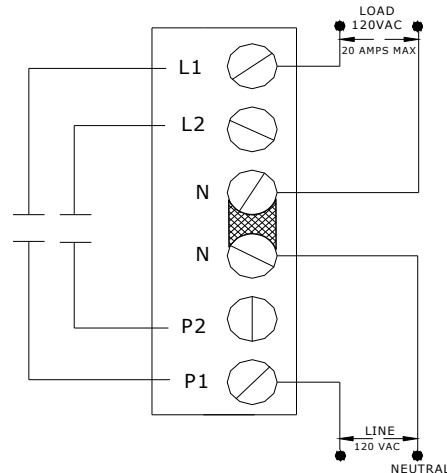


INSTALLATION

Wiring Diagram



Wiring Diagram



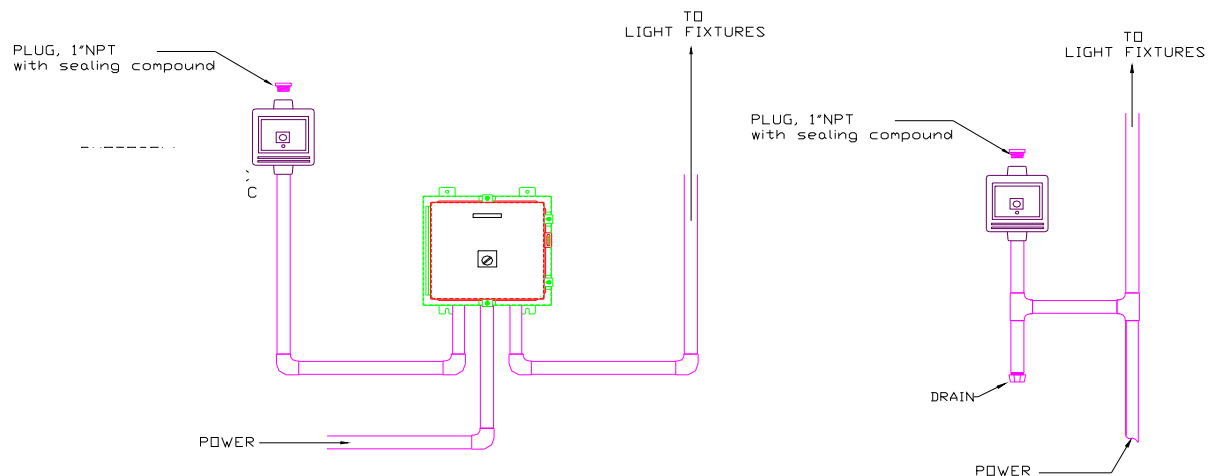
Catalog Number
18001-001

System Voltage
120 VAC

▲ Connection to Power Source and Load

1. Remove the four cover screws
2. Turn cover upside down and hang on housing.
3. Make power and load connections as shown in wiring diagram above. Control should be securely grounded through conduit system, or a separate ground should be connected to the control case to minimise potential damage during electrical storms. Voltage between terminals line and neutral should exceed 230 Volts since this is the input power for the control mechanism.
4. When field connections have been made to the terminal block, reinstall PCF cover using the four screws supplied.

RECOMMENDED PHOTOCELL INSTALLATION



The controller is designed for outdoor mounting in a vertical conduit run. It should face north (in the northern hemisphere) so that the sun rays will not hit the photo control. Mounting height must be such that no blockage of skylight on the photo control window will occur. Light from controlled lighting circuit should not shine on photo control as it may cause unit to turn lights off, setting up an oscillating condition. Although unit has a built-in time delay feature to offset effects of intermittent light sources, care should be used to prevent occurrences of such events.

▲ Maintenance

Only periodic cleaning of the photo control window is necessary. If the unit should fail for any reason, replace immediately

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