

# V2PCT PHOTOCELL REPLACEMENT KIT

## INSTALLATION INSTRUCTIONS AND MAINTENANCE INFORMATION

**IF 1608**

**SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE**

### APPLICATION

The V2PCT integral photocell is designed to provide dusk-to-dawn operation of lighting fixtures in Class I, Division 2 classified areas or ordinary locations when used with the D2S cover with FS/FD boxes, and in Class I, Division 1, Groups B, C, and D; and Class II, Division 1, Groups E, F, and G when used in EV2IH. It provides energy savings by turning ON selected fixtures when necessary. It is ideal for walkways, bridges, security lighting, parking areas, outdoor process areas, or any lighting application in a Class I, Division 2 location, wet location, or corrosive environment. V2PCT photocell is rated for 65°C ambient and up to 1000W, 1000VA.

**⚠ WARNING**

Electrical power must be OFF before and during installation and maintenance.

Before replacing photocell, check that the line voltage matches the photocell input voltage. See table below.

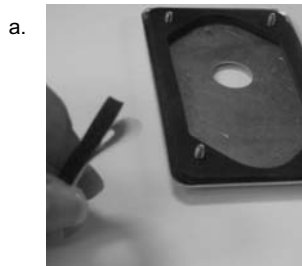
Input Voltage 50/60Hz	Catalog #
120	D2S20
208 277V	D2S208 277

### TO INSTALL PHOTOCELL ON D2S:

1. Unscrew four (4) cover screws.
2. Remove three (3) wire nuts to remove cover with photocell from the FS/FD box.
3. Remove old photocell from the cover by unthreading wire nut.

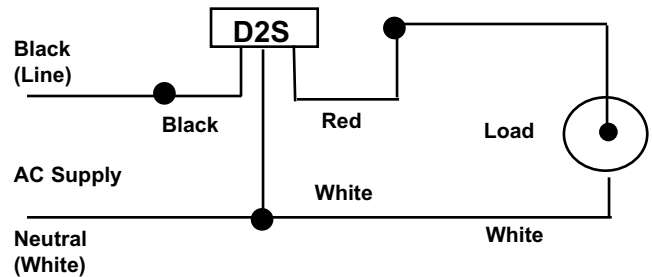


4. Remove old gasket from the inside of the cover and clean the area where gasket was installed. The entire inside of cover should be free of all gasket material before photocell is replaced.
5. Remove white paper from back of foam gasket (a) that comes with photocell and secure adhesive side of gasket to inside of the cover (b).



6. Install photocell into the cover. Secure the device with the wire nut on the outside of the cover. Make sure gasket compresses upon installation.

7. Wire the photocell in the circuit as follows (see Figure 1):
  - a. Black (input voltage) wire of AC supply is connected only to black wire of photocell.
  - b. White (common or neutral) wire of AC supply is connected to white wire of photocell and to white wires of all fixtures being controlled.
  - c. Red wire of photocell is connected to all black (input voltage) wires of fixtures being controlled (load, as shown).
8. Re-attach D2S cover to FS/FD box using the four (4) screws provided. Make certain that cover gasket compresses upon installation.
9. Restore power to fixture.



**Figure 1**



## TO INSTALL PHOTOCELL ON EV2IH:

1. Unthread EV2IH enclosure cover and carefully set it aside to prevent damage to cover threads and glass lens.
2. Remove two (2) screws of photocell mounting bracket.
3. Remove photocell from bracket by unthreading the photocell nut and three (3) wire nuts.
4. Install new photocell by inserting the device into the mounting bracket.
5. Wire photocell in the circuit (see Figure 2).
6. Reinstall mounting bracket inside of the EV2IH body with two (2) screws given.
7. Carefully rethread the cover to enclosure housing. Tighten cover until flange contacts body face.

## Photocell

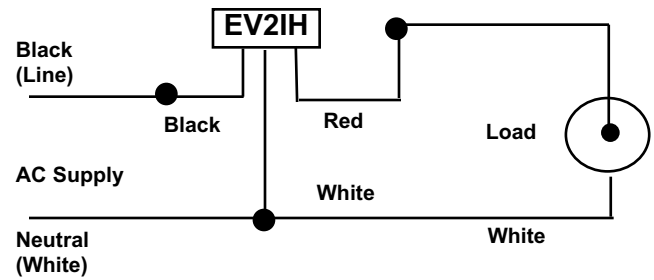


Figure 2

### CAUTION

Use care to prevent dirt, grit or other other foreign material from lodging on threads. If any such material settles on these threads, clean them with kerosene or Stoddard Solvent, then relubricate with Cooper Crouse-Hinds Type STL thread lubricant.

8. Restore power to fixture.



### WARNING

Always disconnect primary power source before opening fixture for inspection or service.

## D2S AND EV2IH MAINTENANCE

1. Frequent inspections should be made. A schedule for maintenance checks should be determined by the environment and frequency of use. It is recommended that inspections should be performed at least once a year.
2. Visually check for damaged parts, undue heating evidenced by discoloration of wires or other components, leakage evidenced by water or corrosion in the interior, and proper lamp operation.
3. The photocell window and the EV2IH glass cover must be clear in order to work properly. To clean, wipe with a clean, damp cloth. If this is not sufficient, use a mild soap or liquid non-abrasive cleaner which will not scratch the window.

## PHOTOCONTROL TROUBLE-SHOOTING

Problem	Cause	Solution
Load stays off	<ol style="list-style-type: none"> <li>1. Line voltage too high</li> <li>2. Photocell not rated for supply voltage</li> <li>3. Incorrect wiring</li> <li>4. External lights striking photocell</li> </ol>	<ol style="list-style-type: none"> <li>1. Correct voltage and replace photocell</li> <li>2. Replace control with one having proper rating</li> <li>3. Check wiring diagram</li> <li>4. Reposition photocell</li> </ol>
Load stays on	<ol style="list-style-type: none"> <li>1. Line voltage too low</li> <li>2. Photocell not rated for supply voltage</li> <li>3. Not enough light striking window during daylight</li> <li>4. Contacts of photocell welded due to excessive load</li> <li>5. Incorrect wiring</li> </ol>	<ol style="list-style-type: none"> <li>1. Correct voltage and replace photocell</li> <li>2. Replace control with one having proper rating</li> <li>3. Reposition photocell in direction of more light</li> <li>4. Check that no more than permissible load is controlled</li> <li>5. Check wiring diagram</li> </ol>
Load blinks at night and remains off during the day	<ol style="list-style-type: none"> <li>1. Light from load is directly or indirectly shining on photocell window</li> <li>2. Incorrect wiring</li> <li>3. Cycling HPS lamp near end of life</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-position photocell so it is not exposed to connected lights</li> <li>2. Check wiring diagram</li> <li>3. Replace lamp</li> </ol>
Load blinks during the day and remains on at night	<ol style="list-style-type: none"> <li>1. Incorrect wiring</li> <li>2. Insufficient light on photocell</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring diagram</li> <li>2. Reposition away from overhangs, trees, etc</li> </ol>
Fuse blows when power is supplied	<ol style="list-style-type: none"> <li>1. Incorrect wiring</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring diagram</li> </ol>

All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof are not guaranteed. In accordance with Cooper Crouse-Hinds "Terms and Conditions of Sale," and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection therewith.