

## Installation Instructions for 'Orion' Range

- 2000W Photocell Kit - PEC1000 & Replacement Head - PECH
- 1000W Photocell Kit - PEC500 & Replacement Head - PECH500

### GENERAL INSTRUCTIONS

These instructions should be read carefully and retained after installation for further reference and maintenance.

### SAFETY

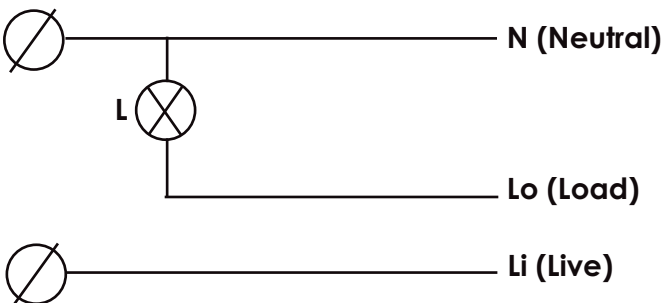
Before installation or maintenance ensure that the mains supply to the unit is switched off and the circuit supply fuses are removed or the circuit breaker is turned off.

**It is recommended that a qualified electrician is consulted or used for the installation of this photocell and installed to the current edition of the IET wiring regulations.**

### INSTALLATION

1. Carefully choose the correct position to install the photocell kit considering the following guidelines:-
  - Where possible there should be a clear view of the sky, allowing sufficient distance when mounting under eaves.
  - For optimum performance the position chosen should have a clear view of north.
  - Be away from view of any artificial light source.
  - Be away from view of the light source the unit is to control.
  - Be inaccessible to unauthorised persons.
2. Securely fix the base holder to a vertical wall so that the head will be facing up when fitted.
3. Fit the gasket into the base holder foam side up.
4. Enter the supply & load cable into the base through the hole in the bottom of the base ensuring that a cable gland, grommet or sealing compound is used to maintain the IP rating of the unit.
5. Terminate the cable into the NEMA socket observing the correct connections:-

**'Li' = LIVE (supply in)**  
**'Lo' = LOAD (supply out)**  
**'N' = Neutral**



6. Place the NEMA socket into the base holder with the arrow printed on the socket pointing towards north, if north is located behind the unit or towards the mounting surface then the arrow should be aligned pointing in the direction of the best natural light.
7. The base holder has 2 locating pins for the NEMA socket to fit onto, the NEMA socket should then be secured using the 2 countersunk self tapping screws provided.

- Align the largest of the 3 brass feet marked 'Neutral' on the photocell head with the largest slot in the NEMA socket, push the photocell head into the NEMA socket and gently turn clockwise to lock into place.

## OPERATION & TESTING

- The photocell always powers up in the 'On' position, if in bright daylight it will switch off within 2 minutes, normal operation will then resume.
- To test for correct operation cover the photocell with the packing box, after a short delay, 15 - 120 seconds, the photocell will operate and power will be applied to the load. If tested in bright daylight after a similar delay the photocell will turn off the power to the load when the packing box is removed.

## COMMON PROBLEMS

### The load stays on:-

The photocell is in a shady or dark position or the neutral is not connected.

### The load is flashing, strobing or switching on and off repeatedly through hours of darkness:-

The photocell is too close to the light source it is controlling or 'Li' & 'Lo' are reversed.

**Note:** These photocells are LED compatible and can run up to 400 watts, the number of light fittings should be limited to no more than **10 fittings**.

## TECHNICAL INFORMATION

Type:	Electronic Relay Load Switching
Voltage:	230V ~50Hz
Sensor:	Photodiode
Light Level:	On <20Lux Off >80Lux
Typical Load:	
PEC1000:-	2000W Tungsten or 2 x 400W HPS or 1800VA 400W Max LED
PEC500:-	1000W Tungsten or 2 x 240W HPS or 900VA 400W Max LED
Operating Temp:	-20°C to +80°C
Max Switching Capacity:	
PEC1000:-	10A
PEC500:-	5A
Switching Delay:	10 - 15 seconds
Enclosure Material:	UV Stabilised Polycarbonate
Power Consumption:	<0.25W
IP Rating:	IP65
Electrical Life:	6500 cycles
Conforms To:	EN 60947-1 EN 61000-3 EN 61000-6

**PLEASE KEEP THESE INSTRUCTIONS  
SAFE FOR FUTURE REFERENCE**

### GUARANTEE

*Your GreenBrook Photocell Kit  
is guaranteed for 1 year from  
the date of purchase.  
This is in addition to your statutory rights.*

**EMC**



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