

August 2007

Wiring Diagrams (Pin numbers are for reference only, rely on pin location when wiring)

| Operating Voltage | Models | Cable Models | Mini-Connector Models (Face View Male Shown) |
|-----------------------------|--------------------|--------------|--|
| 115V AC or 230V AC | Thru-Beam Source | | |
| | Thru-Beam Detector | | |
| 20 – 264V AC or 15 – 30V DC | Standard Output | | |
| | Relay Output | | |
| 10 – 30V DC | Thru-Beam Source | | |
| | All others | | |

Specifications

| | Thru-Beam | | | All Other Models | |
|--------------------------|---|--|--|---|--|
| | 115V AC Models | 230V AC Models | 10 – 30V DC Models | AC/DC Models | 10 – 30V DC Models |
| Input Voltage | 90 – 132V AC, 60 Hz 100 – 132V AC, 50 Hz | 180 – 264V AC, 60 Hz 200 – 264V AC, 50 Hz | 10 – 30V DC, 35 mA | 20 – 264V AC, 50/60 Hz or 15 – 30V DC | 10 – 30V DC, 35 mA |
| Power Dissipation | 2W | 2W | 1W | 2W | 1W |
| Operating Temperature | -22° to +158°F (-30° to +70°C) | | | -40° to +158°F (-40° to +70°C) | |
| Output: | VMOS, 50 mA maximum resistive or relay-load; Off-Stage leakage is 0.1 mA maximum | | Sink/source/TTL, open collector transistor, 50 mA maximum load current | Standard Versions: VMOS, 300 mA max./NPN, 300 mA max. Relay Output Versions: 3A SPDT relay | NPN: 250 mA max., 1.8V drop max. PNP: 100 mA max., 2.6V drop max. (not TTL compatible) Optional Relay Models: SPDT 3A contact |
| Response Times | Dark-to-Light: 5 mS Light-to-Dark: 11 mS | | | 10 mS | 1 mS |
| Short Circuit Protection | — | | | Sensor will turn off immediately when a short or overload is detected (indicator LED will flash). Turn power OFF and back ON to reset. IMPORTANT: During installation, correct power connections must be made first to ensure fail-safe short circuit protection of the outputs. | Sensor will turn off immediately when a short or overload is detected (indicator LED will flash). Sensor will reset when short is removed. |
| Sunlight Immunity | 100 foot Thru-Beam models: 6,000 foot-candles All other models: 10,000 foot-candles | | | | |
| Humidity | 95% relative humidity, non-condensing | | | | |
| Case Material | Noryl® (avoid exposing to chlorinated, halogenated, or aromatic hydrocarbons) | | | | |
| Lens Material | Nylon | | | | |
| Vibration | 15g or 0.06 inch displacement, whichever is less, over 10 Hz to 2 kHz (relay models: 10g over 10 – 55 Hz) | | | | |
| Shock | 40g for 10 mS and 500g for 2 mS, 1/2 sine wave pulse (20g for relay models) | | | | |
| Enclosure Ratings | NEMA 1, 3, 4, 6, 12 and 13 ^① | | | | |

① NOTE: Our products conform to NEMA tests as indicated, however, some severe washdown applications can exceed these NEMA test specifications. If you have questions about a specific application, contact Eaton's Cutler-Hammer Sensor Applications Department at 1-800-426-9184.

Approximate Dimensions in Inches (mm)

Sensors

