



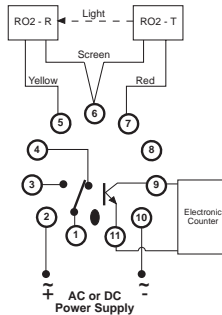
Opto-electronic Control Relay for Rhomberg RO2 Photo-electric sensors

SC 410



WIRING EXAMPLE

(requires optional RO2 sensors & S3-B base)



Application Examples

- Long distance proximity sensing of objects on conveyors
- Crane & hoist protection on over travel
- Gap detection on mechanical handling systems
- Automatic initiation of vehicle washing systems
- Control of security gates
- Contrast sensing between dark and light (coding strips on material handling systems).
- Single beam safety barrier for access control to certain hazardous areas
- Edge control on material alignment

ORDERING CODE

TYPE	SUPPLY VOLTAGE	AC/DC	RELAY CONTACTS
SC410	240	AC	S

Technical Specification

Power Supply:

AC: 12, 24, 110, 240 (ie. 220-240), 400, 415, 525V ±15%
 Isolation (sensor input to power supply): 2kV
 DC: 10-30V, 48, 60, 110V ± 15%
 Isolation: no galvanic isolation (common negative)

Response:

ON Delay: 0.03 - 5 seconds (adjustable)
 OFF Delay: 0.03 - 5 seconds (adjustable)

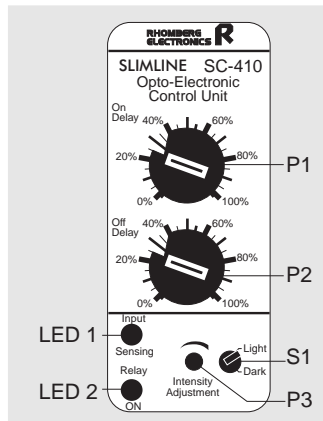
Transmitter (pin 6-7): Current pulse: 1.5A/25 microseconds.
 Short circuit current: 20mA (average)

Receiver (pin 5-6): Short circuit current: 3mA
 Open circuit voltage: 8.2V

Open collector NPN transistor output (pin 9-11):
 Output sink current: 100mA, Maximum voltage: 30VDC

Solid state relay output (pin 8-9):
 Maximum output source current: 8mA
 Open circuit output voltage: 12VDC

Description of Controls

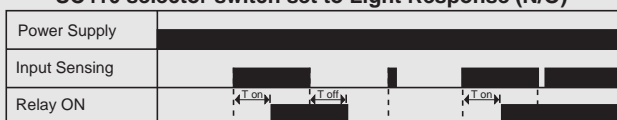


- P1: **The ON-response Delay** is adjusted on P1.
- P2: **The OFF-response Delay** is adjusted on P2.
- P3: **The Light Intensity** is adjusted on P3, using a fine screwdriver. (Twenty turns clockwise will adjust sensitivity from minimum to maximum).
- S1: **Function Selection** is provided by S1. If set to "Light", the relay energises when the beam is sensed. If set to "Dark", the relay energises when the beam is interrupted.

- LED 1: The LED marked "Input Sensing" illuminates whenever the transmitted light beam is sensed by the receiver.
- LED 2: The LED marked "Relay ON" illuminates when the output has responded and the relay is energised.

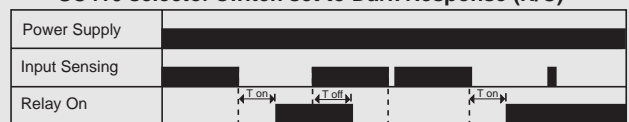
Operational Diagrams

SC410 selector switch set to Light Response (N/O)



Ton = ON delay

SC410 selector switch set to Dark Response (N/C)



Toff = OFF delay