

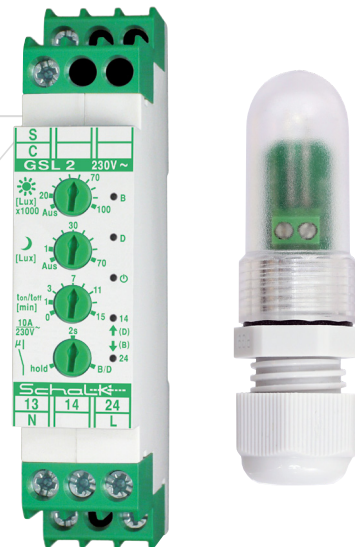


Limit switch for light intensity GSL 2 Light sensor SL 2

Combined brightness detection (2 separate adjustment ranges: twilight 1-70 lux/ shade 20,000-100,000 lux) for controlling shading solutions or twilight-dependent control for lighting or OPEN/CLOSE motor control applications, etc, with internally-generated sensor supply voltage.

Special features

- ▶ potential-free relay contacts
- ▶ galvanically isolated sensor inputs (PELV)
- ▶ configurable response delay
- ▶ configurable momentary or permanent control
- ▶ automatic reverse pulse
- ▶ display for switch threshold and switch state
- ▶ direct output of switch thresholds in B/D mode (one relay output each for shading and twilight)



Measuring relays

General

The GSL 2 is a universally applicable limit switch for brightness monitoring.

With two separate adjustment ranges from 1-70 lux for twilight monitoring and 20,000-100,000 lux for shade monitoring, the switch can be used for many different applications (shading systems control, brightness-dependent louver/shutter control, simple detection of light sensors from downstream controls such as SPS, etc.) The two operating modes and an automatically generated reverse pulse make it easy to integrate into a wide range of applications.

Applications

Shading and twilight switch for light or OPEN/CLOSE controls, louver and blind automation, detection of light sensors for downstream controls.

Functional description

The two top setting are used to adjust the desired switch thresholds (in lux) for shade and twilight. The separate LEDs for shade or twilight are used to help to make the adjustment. They start flashing as soon as the brightness detected by the light sensor goes above or below the setting.

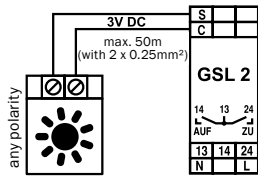
With the „ton/toff“ setting, a response delay can be set to switch the relay outputs after a time delay.

The bottom setting selects the operating mode:

- 2s only a short (2s) pulse is generated at the corresponding relay output
- hold the relay output remains switched until the input value changes again
- B/D in this mode the sensor state is directly output to the corresponding relay output (K14 = twilight, K24 = shade)

The state of each relay is displayed on the “K14” and “K24” LEDs respectively.

Example

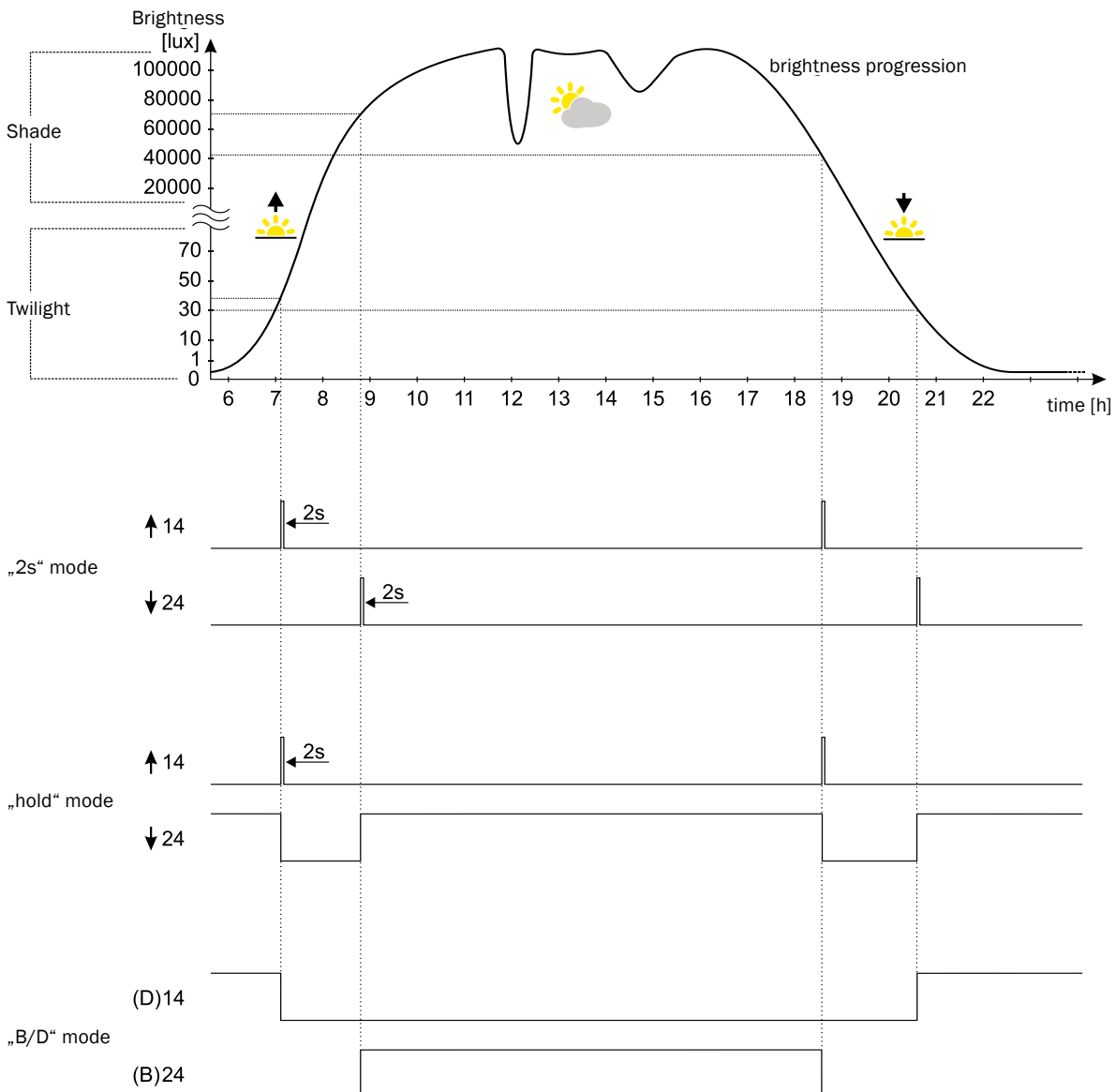


Light sensor SL 2

Fig. 1: Light sensor connection

Functional diagram:

Example: ton/toff = 0; Shade = 70000 lux; Twilight = 30 lux



Technical data GSL 2

Operating voltage	230V 50/60Hz 10 %
Power consumption	0.6W
Adjustment ranges	shade: 20.000-100.000 lux / twilight: 1-70 lux
Switching hysteresis	shade: 40% / twilight: 20%
Response delay	0=OFF or 1-15min
Relay switching dead time	0.6s
Sensor voltage	3.3V DC PELV (short-circuit proof)
Relay outputs	2 NO 10A/250V AC potential-free
Relay contact rating	see data sheet "Relay contact load ratings"
Ambient temperature	-10°C to +45°C
Connections	Cage clamp terminals with captive screws M3.5
Clamping range	0.5 mm ² - 4.0 mm ²
Strip length	6.0 mm - 6.5 mm
Screwing torque	0.80 Nm
Installation position	arbitrary
Fixing	Snap-on mounting on 35mm top-hat rail according to EN 60715
Outside dimensions	18 x 88 (45) x 58 mm
Installed depth	55 mm
Weight	approx. 75g
RAL colour	grey 7035 / green 6029

Technische Daten SL 2

Sensor type	Phototransistor
Protection class	IP65
Screw connection	PG9
Maximum line length	max. 50m (at 2 x 0.25mm ²)
Dimensions	ca. 65 x 21mm

Order data

Part no.	EAN	Type	Description
GSL209	4 046929 301381	GSL 2	Grenzwertschalter für Licht (Beschattung/Dämmerung) 230V AC, 2 Schließer 10A pf
SL2000	4 046929 301398	SL 2	Lichtsensor mit Clip-Halterung