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DESCRIPTION

The twilight switch WZS-01 is used to control lighting devices and other energy receivers depending on luminous flux density. The system switches on the lighting at dusk and switches off at dawn. The switching on threshold can be adjusted by the user and does not require the opening of casing. The system is resistant to momentary changes of luminous flux density and the same guarantees its reliability. The system is equipped with inner luminous flux density sensor.

FEATURES

- It allows to switch on and/or switch off lighting devices according to the preset ambient light level,
- adjustment of the switch on threshold,
- wide setting scope of the switch on threshold (from 0 to 200 lx),
- inner lighting sensor,
- resistant to momentary changes of luminous flux density,
- hysteresis of the switch-over threshold,
- hermetic (IP54 protection degree) enclosure,
- voltage relay output max 16 A capacity.

TECHNICAL PARAMETERS

WZS-01

Input (supply) terminals:	L, N
Input rated voltage:	230 V AC
Input voltage tolerance:	from -15 to +10 %
Nominal frequency:	50 / 60 Hz
Rated power consumption:	24 mA
Output (load) terminals:	P, N
Threshold adjustment range:	from 0 to 200 lx (rotational potentiometer)
Lighting sensor:	inner
Output relay parameters:	1NO-16 A /250 V AC1 4000 VA (voltage contact)
Number of terminal clamps:	4
Section of connecting cables:	from 0,2 to 2,50 mm ²
Ambient temperature range:	from -20 to +45 °C
Operating position:	vertical, potentiometer pointed down
Mounting:	2x stretcher 6x(3,5x35)
Protection degree:	IP54 (PN-EN 60529)
Protective class:	II
Overvoltage category:	II
Pollution degree:	2
Rated impulse withstand voltage:	1 kV (PN-EN 61000-4-5)
Dimensions:	84x68x43 mm
Weight:	0,100 kg
Reference standards:	PN-EN 60669-1 PN-EN 60669-2-1 PN-EN 61000-4-2,3,4,5,6,11



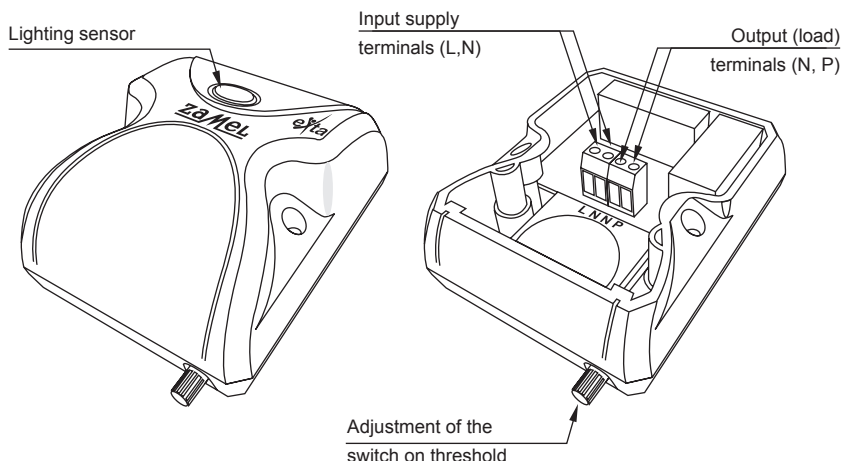
The device is designed for one-phase installation and must be installed in accordance with standards valid in a particular country.

The device should be connected according to the details included in this operating manual. Installation, connection and control should be carried out by a qualified electrician staff, who act in accordance with the service manual and the device functions. Before installation make sure the connection cables are not under voltage. The cruciform head screwdriver 3,5 mm should be used to instal the device. Improper transport, storage, and use of the device influence its wrong functioning. It is not advisable to instal the device in the following cases: if any device part is missing or the device is damaged or deformed. In case of improper functioning of the device contact the producer.



The symbol means selective collecting of electrical and electronic equipment. It is forbidden to put the used equipment together with other waste

APPEARANCE



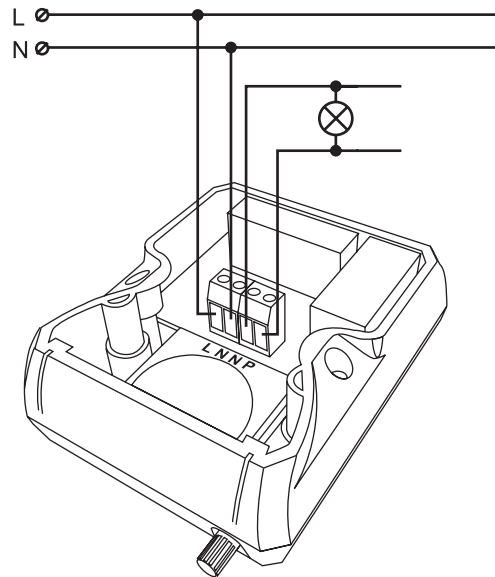
MOUNTING, FUNCTIONING

1. Disconnect the power supply from the mains by the phase fuse, the circuit-breaker or the switch-disconnector that are joined to the proper circuit.
2. **Check if there is no voltage on connection cables by means of a special measure equipment.**
3. Unscrew the casing.
4. Fasten the **WZS-01** to the base with the screw.
5. Connect the cables with the terminals according to installing diagram.
6. Screw the casing.
7. Switch on the power supply from the mains.
8. Set the potentiometer of the threshold of switching the lighting to a minimum.
9. If the lighting outside reaches the level at which the lighting installation is to switch on – turn delicately the potentiometer in the direction of a maximum, until it switches on.
10. Leave the potentiometer in a set position.

Turning the potentiometer in the direction of (half moon "C") causes the device to switch on at lower lighting level, in the direction of (the sun "☀") causes the device to switch on at higher lighting level.

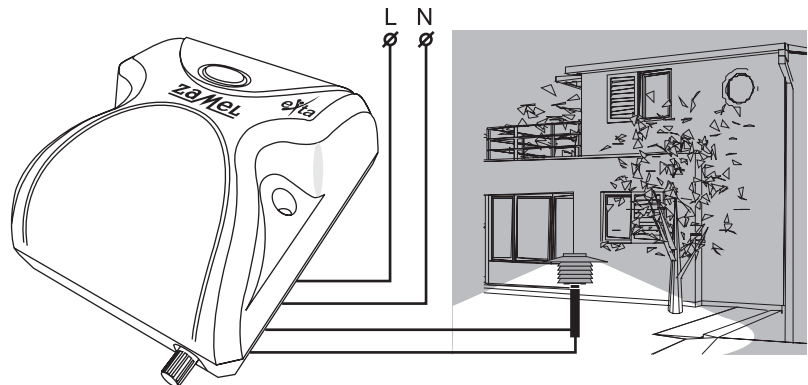
In case the inner sensor's luminous flux density falls below the preset threshold the system switches on the output relay and its lighting devices. The relay is switched on until the luminous flux density is over the preset threshold. Using the luminous flux density hysteresis (Δ) and relay switching off time delay (T) makes the system resistant to momentary and accidental light pulses. While mounting the twilight switch pay attention the switched on lighting does not disturb the functioning of the inner lighting sensor.

CONNECTING DIAGRAM



EXAMPLE OF INSTALLATION

luminous flux density				
	200 lx	35 lx	20 lx	2 lx
position of potentiometer				
	min. max.	min. max.	min. max.	min. max.



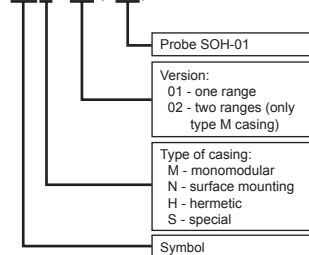
Typical application:

The twilight switch operates the light control functions (for example garden lighting). The device should be installed in a place which is not directly illuminated by lights that are operated by this twilight switch.

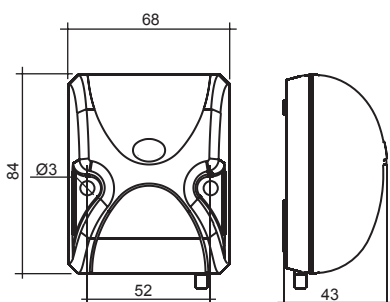
PRODUCT FAMILY

The twilight switch WZS-01 belongs to the twilight switches WZx family.

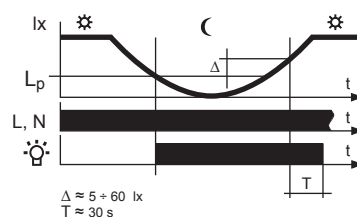
WZx - xx (/ S1)



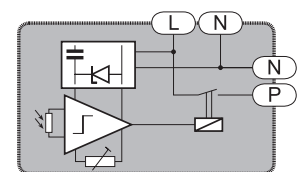
DIMENSIONS



TIME COURSE



INNER DIAGRAM



RELAY CAPACITY

