

# Light-value control switch for 1 circuit, type LWS1

Light-sensor-controlled light value control switch for all kind of lamps

Order-No.: 50.14.011

The LWS 1 switches all connected lamps in dependence of the daylight.

It has an autonomous current supply.

The sensor acquires the daylight and transmits it as control voltage to the LWS 1 which switches the lighting according to the set value. The light sensor acquires only daylight. It is of the protective type IP 55 and consequently can be mounted outside or inside a building. Inside a room it should be mounted close to a window or the best possible acquisition of daylight.

## Working range

with the slide switch the required working range can be set at the module between lux x 1 or lux x 20 (one range between 10 and 1000 lux, the other one between 200 and 20000 lux).

## Light level setting

With the rotary potentiometer 'switch OFF value' the light level is set at which lighting shall be switched OFF. With the potentiometer 'switch ON value' the percentage of the switch OFF value is set, at which lighting shall be switched ON again (between 50 and 95 % of the switch OFF value). If for instance the switch OFF value is set to 500 lux and the switch ON value is set to 80 %, lighting switches ON as soon as daylight level falls below 400 lux.

## Indication of the switch state

An LED at the LWS 1 indicates the expected switch state. An LED indicates if the lighting is switched ON or will be switched ON after the set delay time.

## Delay times

Can be set between 5 secs and 20 min. individually for switch ON and for switch OFF.

## Switch ON interlock

A slide switch (ON/OFF) activates or deactivates the automatic operation of the LWS1. If it is activated an external pushbutton manually operates the lighting (this however is only possible if the daylight does not exceed the set light level). With the same push-button lighting can be switched OFF manually.

## Load capacity

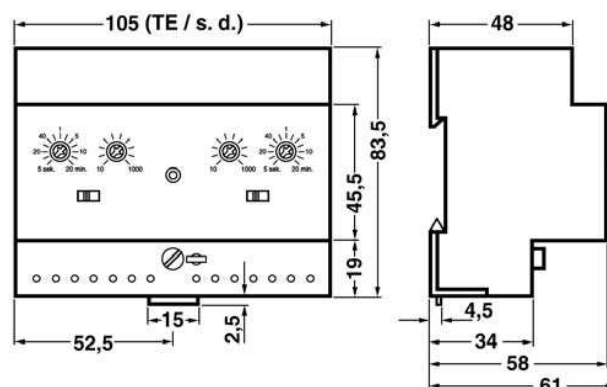
The LWS 1 has an own switch capacity of 10A/250V~. With its voltage-free contact external relays or contactors can be switched.



## Technical data:

Characterization	light-value control switch LWS1
Type	: LWS 1
Order-no.	: 50.14.011
Power supply	: 230V, 50/60 Hz
Max. contact load	: 10A/250V~ or 10A/30 V~
Protection	: external 6 A
Ambient temperature	: max. 45°C with natural air-convection (at vertical mounting position)
Terminals	: 0,5 – 2,5 mm <sup>2</sup> , solid wire or litz wire with sleeve
Wire length	: max. 100 m
Own consumption	: approx. 2VA
control voltage	: (0..5V) light sensor, pushbutton galvanic separated
	<b>No protective low-voltage</b> (Basic isolation according to IEC 664,10/92)
Housing	: plastic for DIN rail systems
Dimensions	: WxHxD = 105x83,5x61mm
Weight	: approx. 400g
Protective type	: IP 20
Contamination grade	: 2 (dry, non-conductive according IEC 664,10/92)
Requirements	: EMC met accord. to EN 61547 4/96 Low-voltage met acc. to IEC 669-2-1 11/94
Accessory	: 1 light sensor (see page 59)

## Dimensional drawing LWS 1

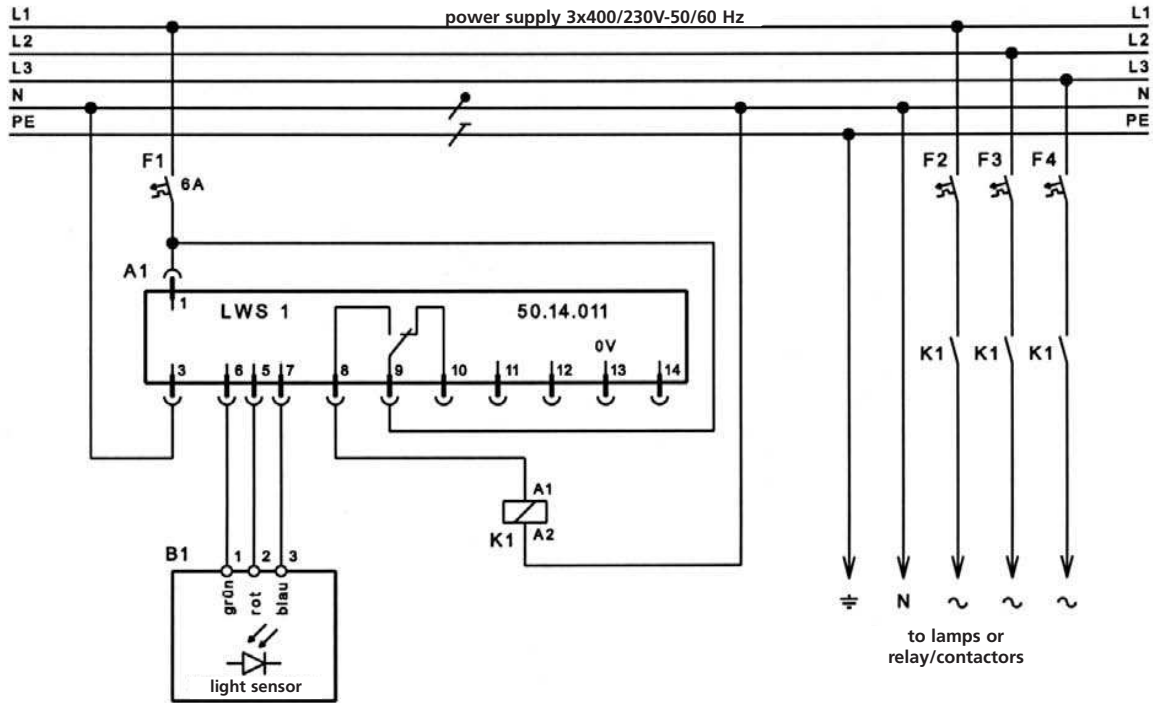


# Wiring diagrams

Light value control switch LWS 1

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## Light value control switch LWS 1 with external relay for the amplification of the switch capacity



## Light value control switch LWS 1 with an external pushbutton ON/OFF, to be operated after the activation of the slide switch ,interlock'. The load is directly switched.

