

Mounting instruction

LightWatcher

Art.no 020433

Art.no 020434

Art.no 020435

Warning notices:



The W+W LightWatcher may only be used for the lighting of lift cabins.



**The assembly has to be effected by specialised persons* only.
When mounting all corresponding safety regulations and measures for the
assembly of lifts are to be considered.**



**Assembly, disassembly and maintenance can only be carried out if the lift
system is switched off.**



All indications in the mounting instruction are absolutely to be followed.

Keep the instruction for later use!

*Specialised person (corresponding to EN81-20):

A person who has been trained accordingly and disposes of expertise based on knowledge and experience, and who is equipped with the necessary instructions to be able to safely effect the required maintenance or control of the lift, or the rescue of passengers.



Scope of delivery:

Art.no	description
020433	W+W LightWatcher
020434	W+W LightWatcher in a case
020435	W+W LightWatcher in a case for CabinLED-NSG

1x LightWatcher
1x mounting instruction

1x LightWatcher in a case pre-wired with 3 m supply cable
1x mounting instruction

1x LightWatcher in a case for the W+W emergency power unit
pre-wired with 3m cable and 2m control cable
1x mounting instruction

Technical Specification



Supply voltage:	230V AC 50Hz/60Hz
Power received:	2 VA
Relay outputs:	3
Max. switching voltage.:	250V AC o 30V DC
Max. continuous current:	8A (AC) o 5A (DC)
Max. switching capacity:	2000 VA (AC) o 150W (DC)
Supplementary control inputs:	4
Control voltage (E1-E4):	12V - 230V AC/DC
Type of protection:	IP20 (20433)
Dimensions:	L:106 x W:90 x H:48mm
Lightwatcher in a case 020434 + 020435	
Case:	L:200 x W:200 x H:130mm
Type of protection:	IP65
Supply line	YSLY-JZ 3x1.5mm ²
Control line (only20435)	YSLY-OZ 2x1.0mm ²

Functions

LightWatcher is to be mounted directly onto the car roof. The LightWatcher in the case can simply be laid on the cabin roof. Any movements of the car can be detected by three integrated acceleration sensors. The sensors are sensitive enough to recognize also door movements.

As soon as a movement in the car is perceived, the cabin light is switched on. The switching threshold for sensing movements can be set directly on the LightWatcher-gadget. Provided that no further car or door movements are sensed, a certain time will elapse before the cabin light is switched off again. This delay can be preset as well

To install LightWatcher, the lighting branch-circuit is simply cut and LightWatcher placed in. Supplied with power by the lighting branch-circuit, LightWatcher does not require any further wiring.

LightWatcher can, apart from the cabin light, switch off an additional consumer. Moreover, for the power-saving mode a third contact has been provided that can switch on a consumer so as to activate the emergency light for example.

For special applications that require the cabin light to be activated not only by the movement-sensors but also by other sensors or functions, four potential-free inputs have been provided, that can be used reversely as well. All relay contacts are closed, if the LightWatcher is not supplied with operating voltage.

Contacts and control elements



1. Supplementary control inputs
2. Relay output for connectible switch-on consumers
3. DIP-switch for reversing the control inputs
4. Relay output for connectible switch-off consumers
5. Switched supply voltage of cabin light
6. Supply voltage
7. Sensitivity dial
8. Switching delay dial

Description

8. Adjustment of the switching delay

The power saving mode will be activated after an adjusted time. That is the time to elapse after the movement last sensed resp. the control signal last received. It will start elapsing again after the next movement sensed or control signal received.

This time can be steplessly set by the rotary dial to intervals between 1 min and 10 min.

7. Adjustment of the switching threshold

By this rotary dial you can set the switching threshold of the internal movement/acceleration sensors. Door movements are typically included in the sensitivity. For this purpose, after installing the gadget on the car roof, make the doors move and simultaneously set the dial to a switching threshold that ensures safe sensing of door movements, but skips ambient vibrations such as for example adjacent lifts in the well. Surpassing the set threshold will be signalled by the LED motion.

6. Supply voltage LightWatcher and cabin light

To these terminals, apply the supply voltage for LightWatcher and the cabin light to be switched. At article 020434 the supply line already is connected (by terminal 1, N PE).

5. Switched supply voltage cabin light

Supply voltage of the LightWatcher is connected through to these terminals, in order to have the cabin light switched. Connect the cabin light to these terminals. (at 020434: terminals 2, N, PE)

Power saving mode active: no voltage at L-contact

Power saving mode non-active: supply voltage to be connected through

4. Relay output for connectible switch-off consumers (additional function)

This potential-free relay output can be used to switch off an additional consumer in the energy-saving mode. This contact can be used for example for low-voltage cabin lights, fans and so on.

Power saving mode active: relay-contact open

3. DIP-switch for reversing the control inputs (additional function)

As soon as voltage is applied to one of the control inputs, LightWatcher will deactivate the power saving functions. Provided that one or more of the control inputs shall be connected reversely, i.e. deactivation of the power saving functions in case there is no voltage applied, the according DIP-switch (reverse E1 through E4) is to be set to "ON".



2. Relay output for connectible switch-on consumers (additional function)

This potential-free relay output is switched on as soon as LightWatcher activates the power saving mode.

Power saving mode active: relay-contact closed

Power saving mode non-active: relay-contact open

No supply voltage: relay-contact closed

(020435 inverts the state of the relay on the control cable when there is no supply voltage.)

1. Supplementary control inputs (additional function)

There are three potential-free inputs E1 through E4, that can be reversed as well. They are intended for special applications, where not only the internal movement-sensors but also other sensors or functions (such as for example pressing the alarm button) shall switch the cabin light on. These inputs can be wired with direct or alternating current signals between 12 V and 230 V. Regarding the inversion, refer to 3.

After connecting LightWatcher to the supply voltage, it will take approx. 30 sec for the movement-sensor to be ready for operation. During that time, the cabin light will be left on.

LED status display

E1	on	Input E1 active	energy saving	on	Power saving mode active
	off	Input E1 non-active		off	Power saving mode non-active
E2	on	Input E2 active	timer	on	Timer blocked
	off	Input E2 non-active		off	Timer lapsed
				flashing	Timer in operation
E3	on	Input E3 active	motion (E4)	on	movement sensed
	off	Input E3 non-active		off	no movement sensed
E4	on	Input E4 active			
	off	Input E4 non-active			

Connection plan LightWatcher in a case 020434 + 020435



Terminal	Description
1	Phase supply line (already connected)
N	Neutral conductor supply line (already connected)
PE	Protective conductor (already connected)

The supply line (YSLY-JZ 3x1,5mm²) has to be connected to the cabin light terminals inside of the car roof control box.
lead 1 = phase, lead 2 = neutral conductor

2	Phase outgoing line to the cabin lighting or appliances (e.g. NSG-24V-60W)
N	Neutral conductor outgoing line to the cabin lighting or appliances (e.g. NSG-24V-60W)
PE	Protective conductor outgoing line to the cabin lighting or appliances (e.g. NSG-24V-60W)



Only 020435

Lead 1 and 2 have to be connected to terminal 1 and 2 of the CabinLED-NSG-24V-60W (Art.no. 020421). An additional cable fitting for the NSG is enclosed.

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