

Light-Twilight-Wind-Sensor Relay

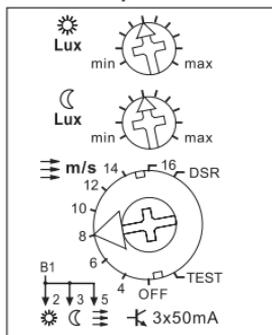
LDW12-8..230V UC

3 OptoMOS semiconductor outputs 50 mA/8..230V UC. Standby loss 0.4 watt only.

The Light-Twilight Wind Sensor Relay LDW12 evaluates the signals from the Light Sensor LS and the Wind Sensor WS and sends appropriate control signals to the downstream EGS12Z or EGS12Z2 actuators depending on the setting of the rotary switch on the front. The OptoMOS semiconductor outputs switch the voltage present on the universal voltage input terminal +B1. Only one single Light Sensor LS and/or Wind Sensor WS can be connected to a Sensor Relay LDW12.

However, at a Wind Sensor WS several LDW12 can be connected for controlling different wind speeds. Then the LDW12 must be connected to the same potential +B1/A2.

Function rotary switches



Lux ☀ = This rotary switch is used to set the brightness 1 klux-60klux at which the **Sun signal** is immediately triggered as a 2-second pulse on output 2. The LED behind the rotary switch indicates when the brightness value is exceeded.

Lux ☾ = This rotary switch is used to set the brightness 1 klux-60klux at which the 2-second **Twilight signal** is triggered on output 3 after the **set** delay time of 15 minutes when the value is undershot. This is indicated by the LED behind the rotary switch. It flashes during the delay time. If the twilight switching threshold is set to the same level or higher than the sun switching threshold, then the sun switching threshold is raised internally above the twilight switching threshold.

m/s = This rotary switch is used to select the wind speed in metres per second at which the **Wind signal** is triggered. This closes output 5. This is indicated by the LED behind the rotary switch. Opening takes place after the delay time of 5 minutes, during which the LED flashes. This is automatically followed by a 2-second pulse on output 2 if the sun signal is present at that moment.

DSR = In this position of the wind rotary switch the LDW12 operates like a twilight sensor relay. The twilight signal as described under Lux ☾ is then

continuously present at output 3 as long as the set twilight value 20lux-2000lux is undershot. Output 3 opens with a delay of 5 minutes if the brightness value 20lux-2000lux set with Lux ☀ has been reached. Output 5 (Wind) likewise remains active, but the wind signal is triggered at 10m/s.

TEST = As long as 'TEST' remains switched on and the respective LED flashes, each switchover from the 'OFF' position to the 'TEST' position activates the outputs 2, 3 and 5 in ascending order.

OFF = In the 'OFF' position the LDW12 has no function.

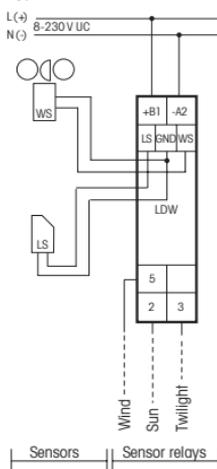
Changing light compensation

Constant changes between sun and rain clouds would result in sensitive closing and opening of the shade elements. This is prevented by a changing light compensation function.

Sensor function and open circuit monitoring

If the signal from the light sensor or the wind sensor is missing for 24 hours, then an alarm is triggered: the LED concerned flashes rapidly. Failure of the wind sensor results in a 1-second pulse on output 5 in order to protect any awnings or windows which may be connected here. This pulse is repeated every hour. The alarm is turned off automatically when signals are detected again.

Typical connection



Technical Data

Supply voltage	8..230V UC
OptoMOS	50 mA/8..230V UC
Max./Min. temperature at mounting location	+50°C/-20°C
Standby loss (activ power) at 12/24/230V	0,05/0,1/0,4 W



The strain relief clamps of the terminals must be closed, that means the screws must be tightened for testing the function of the device. The terminals are open ex works.

Warning!

Only a trained electrician may install this equipment, otherwise there is a risk of fire or electric shock.