

## PIR SENSOR SWITCH MODEL: KSD22

#### INSTRUCTIONS FOR EXPLOITATION

THE INSTALLATION SHOULD BE PERFORMED BY A QUALIFIED ELECTRICIAN ACCORDING TO THIS MANUAL. PLEASE, KEEP THE INSTRUCTIONS.

#### PRODUCT CHARACTERISTICS

Detection Range:	160°
	220-240 V AC, 50-60 Hz
Max rated load:	300 W (incandescent lamps)
	100 W (energy saving and LED lamps)
Detection distance:	max 6 m
	1.0 – 1.8 m
Working temperature range:	20°C +40°C
Time delay:	min. 10 sec $\pm 3$ sec $\sim$ max. 5 min $\pm 2$ min (adjustable)
Ambient light:	<3-2000 lx (adjustable)
Index of protection:	IP20
Power consumption:	0.5W
Working humidity:	< 93%RH
Detection moving speed:	

#### **NOTES AND INFORMATION**

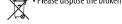
The PIR sensor switch KSD22 is a passive infrared sensor, which detects (monitors) infrared rays (warmth) emitted by the objects that fall into its detection range. The sensor switch turns on / off the load, connected to it, depending on the change of the thermal background in the detection area. That is why it is not recommended to install the PIR sensor switch in areas with great temperature amplitude — near air conditioners or heaters. Infrared sensors are normally used as motion sensors.

#### **SAFETY INSTRUCTIONS**

Any action performed when the main power supply is on has a risk of electrical shock. The power supply must be turned off prior to installation. The max. load should not be exceeded. It is not recommended to use the switch to control luminescent lamps. The switch is designed to be installed in a wall on maximum height of 1.8 meters.

### TAKING CARE OF THE NATURAL ENVIRONMENT CLEANLINESS

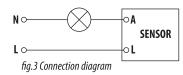
- The product and its components are not harmful to the environment
- Please dispose the package elements separately in containers for the corresponding material.

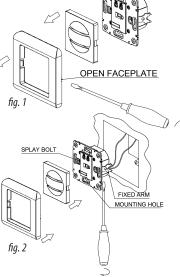


• Please dispose the broken product separately in containers for out of usage electrical equipment.

#### INSTALLATION

- 1. Turn off the main power supply. Take off the front covers of the sensor switch fig. 1.
- Connect the switch according to the connection diagram fig.3 "L" input line, "A" output line.
   Do not connect the sensor switch directly to the mains power!
- 3. Mount the switch to the wall console.
- 4. Adjust the TIME and LUX knobs according to the test procedure below.
- Fix the front covers of the switch. Turn on the power and test the switch.





#### SWITCH MODES (PIR/OFF/ON)

PIR/OFF/ON can be changed with a push button. When the switch is connected to AC power, the sensor mode is turned on automatically.

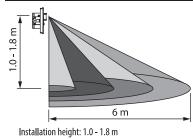
- Sensor mode —> OFF when the switch is ON in sensor mode, press the push button once. The lamp and the sensor stop working. Press the push button once again to return to PIR sensor mode.
- Sensor mode -> ON when the switch is in sensor mode, press the push button for more than 3 sec., the switch will not be in sensor mode and the light will be on.
- **OFF/ON** —> **Sensor mode** when the switch is OFF/ON, press the push button once to start the sensor mode.
- **OFF** –> **ON** press the push button for more than 3 sec. to turn on the lights.

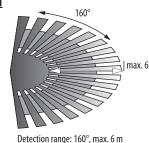
#### **TESTING THE SENSOR**

- Set the switch to sensor mode. Turn the "TIME" knob anticlockwise and the "LUX" knob clockwise to end positions.
- Turn on the power supply and the lights will immediately turn on. 10 seconds ± 3 sec. later, the lights will turn off
  automatically. If the sensor switch detects a moving object, it will work again normally.
- If a movement is detected in the controlled area, the sensor switch will turn on the load. If a movement is detected again during the time delay, the time will be recalculated based on the initial settings.
- To test the sensor switch sensitivity to ambient light, turn "LUX" knob anticlockwise to end position. If the ambient light
  is more than 3 lx, the sensor switch will turn off the load, even if there is a movement in the detection area. If the
  ambient light is less 3 lx, the switch will turn on the load, once detecting a moving object.
- If the switch is covered with non-transparent material, the lamp will be switched on and switched off after 10 seconds (±3 sec).
- If lamp power is greater than 60W, the distance between the sensor switch and the nearest lamp must be more than 60 cm.

# TIME LUX Push button

#### **DETECTION RANGE OF THE SENSOR SWITCH**









#### POSSIBLE REASONS FOR SENSOR MALFUNCTIONS

#### The lamp does not switch on:

- Please check if the power and load connection is correct.
- Make sure the lamp is not defective.
- Check if the working light corresponds to the ambient light.
- When testing in daylight, please turn the LUX knob clockwise, otherwise the load could not work.

#### The sensitivity is poor:

- Please check if there is hinder in front of the detection window to prevent from receiving the signals.
- Please check if the ambient temperature is too high.
- Please check if the signal source is in the detection area.
- Please check if the installation height corresponds to the height shown in the instruction.

#### The sensor does not switch off the load automatically:

- Check if there are continual signals in the detection area.
- Check if the power corresponds to the instruction.
- · Make sure there are no heaters in the sensor range.