EN

PIR SENSOR SWITCH
MODEL: KSD

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°
Power supply: ..... 220V-240V AC, 50-60Hz
Max rated load: ..... 500W (incandescent lamps)
..... 200W (energy saving and LED lamps)
Detection distance: ..... max 9m
Installation height: ..... 0.8 – 1.2m
Working temperature range: ..... -10°C +40°C
Time delay: ..... min. 10 sec ±3 sec ~ max. 7 min ±2 min (adjustable)
Ambient light: ..... <3-2000lx (adjustable)
Index of protection: IP20
Power consumption: 0.5W
Working humidity: ..... < 93%RH
Detection moving speed: ..... 0.6 – 1.5 m/s

NOTES AND INFORMATION

The PIR sensor switch KSD 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 1.2 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.
2. 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.

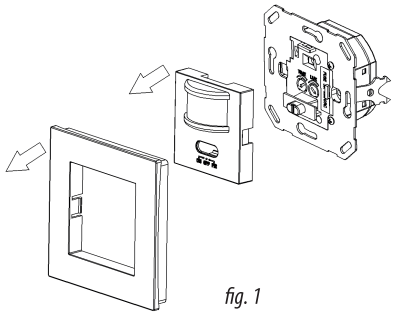


fig. 1

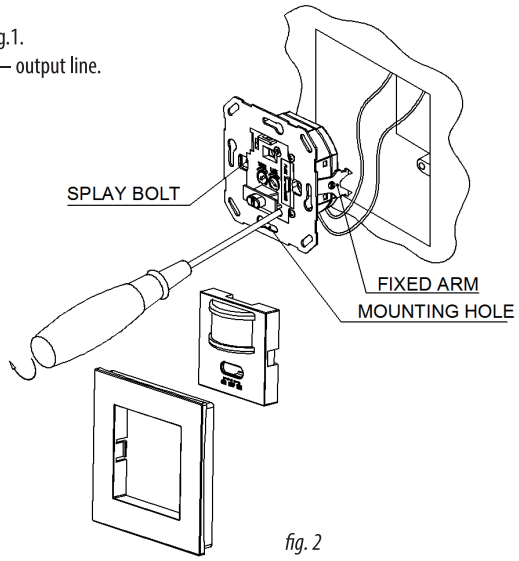


fig. 2

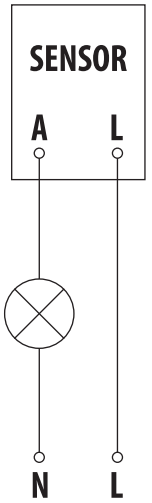
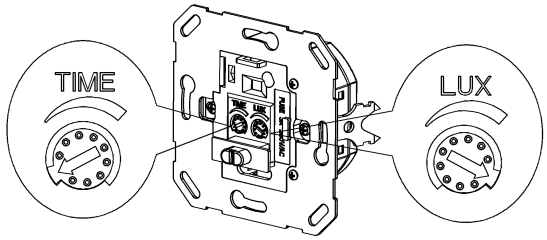


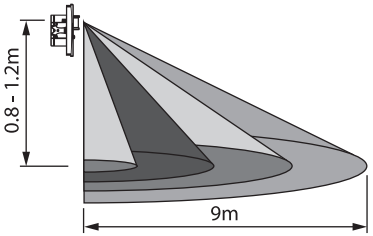
fig.3 Connection diagram

TESTING THE SENSOR

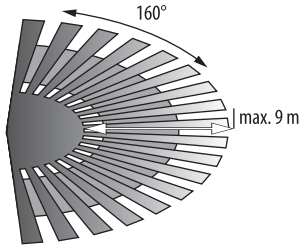
- Before switching the main power supply on, set the sensor switch to "PIR", turn the "TIME" knob anticlockwise and the "LUX" knob clockwise to end positions.
- Turn on the power supply and the lights will immediately turn on. 10 seconds ± 3 sec. later, the lights will turn off automatically. If the 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 3lx, the sensor switch will turn off the load, even if there is a movement in the detection area. If the ambient light is less 3lx, 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.



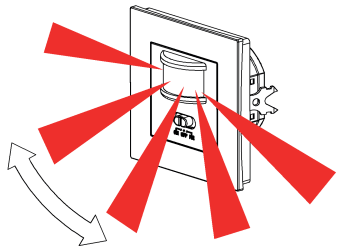
DETECTION RANGE OF THE SENSOR SWITCH



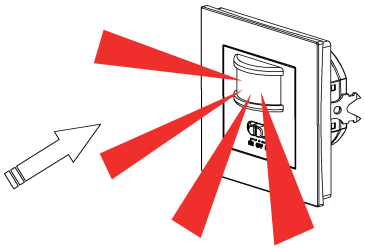
Installation height: 0.8-1.2m



Detection range: 160°, max. 9m



Direction with good sensitivity



Direction with bad sensitivity

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.