

» WRF04I

Motion sensor

thermokon[®]
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
Issue date: 04.12.2019 · A100



» APPLICATION

The surface-mounted motion sensor detects movement of persons and switches a relay contact for lighting control or for lowering the temperature of unused rooms. Fields of application of the sensor are residential and business premises, offices and corridors. The device can be mounted directly on the wall (predetermined breaking point), on a flush-mounted box or in conjunction with a surface-mounted frame available as accessory.

» SECURITY ADVICE – CAUTION



The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

» NOTES ON DISPOSAL



As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

» PRODUCT TESTING AND CERTIFICATION



Declaration of conformity

The declaration of conformity of the products can be found on our website <https://www.thermokon.de/>.

» TECHNICAL DATA

Measuring values	Motion
Output switch contact	open contact, floating for 24 V, load max. 1 A (ohmic), with follow-up time approx. 8 seconds
Power supply	15..24 V = ($\pm 10\%$) or 24 V ~ ($\pm 10\%$) SELV
Power consumption	max. 0,5 W (24 V =) 1,1 VA (24 V ~)
Sensor	PIR (passive infrared)
Detection range	Cone-shaped detection range, angle 110°/93° (H/V), range 10 m, 80 detection zones. With an installation height of 2,8 m range detection will be 7x5 m.
Sensor	PIR (passive infrared)
Enclosure	PC, pure white
Protection	IP30 according to EN 60529
Cable entry	breaking points top/bottom rear entry
Connection electrical	terminal block, max. 1,5 mm ²
Ambient condition	-20..+50 °C max. 85% rH non-condensing
Mounting	surface mounted on flush-mounting box ($\varnothing=60$ mm) or to be mounted flat onto the surface using screws with frame for surface mounting (accessory) or directly on the wall base part can be mounted and wired separately

» MOUNTING ADVICES

The range can considerably deviate upon changing temperature conditions. The necessary temperature difference between object for detection and the background should be at least 5°C. The speed of the object should at least amount to 0,3 to 1,0m/s. The occupancy sensor should not be mounted near interfering heat sources (e.g. lamps, radiators, fans etc.), to prevent false triggering.

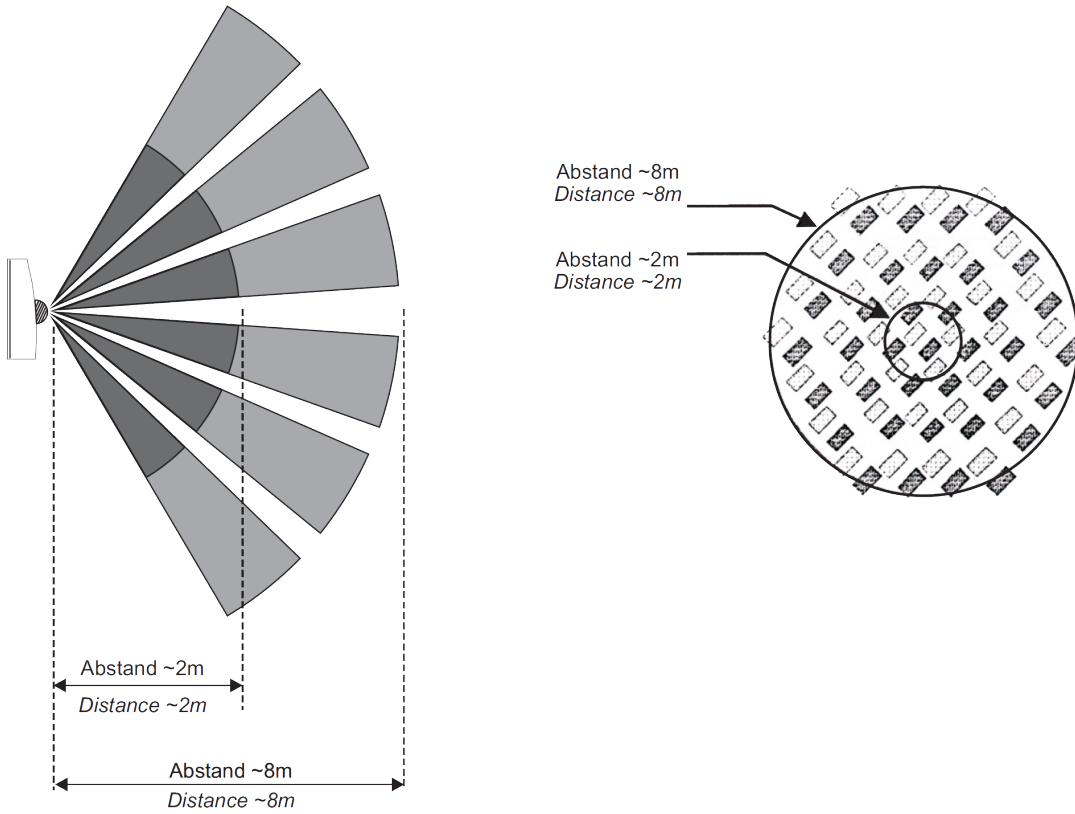
» CONNECTION PLAN

1	2	3	4	5	6	7	8	9	10	11	12
		GND		UV 15..24V= 24V~	Out relay	Out relay					

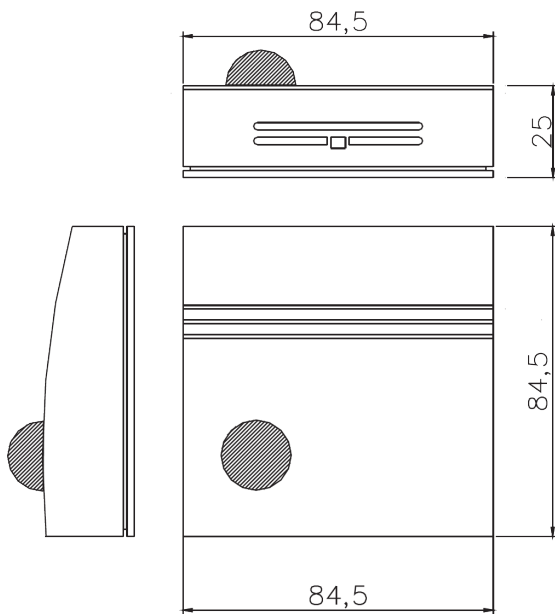
» COMMISSIONING

Remark: After having switched-on the operating voltage, the switch output is switched-on (closed) for approx. 30sec. in the stabilisation status of the sensor.

» DETECTION RANGE (M)



» DIMENSIONS (MM)



Notice: Outside dimensions are depending on the frame used of the respective switch ranges.

» ACCESSORIES (OPTIONAL)

Raw plugs and screws (2 pcs. each)
PSU-UP24 – flush mount power supply 24 V (100..240 V ~ -> 24 V =, 0,5 A)

Item No. 102209
Item No. 645737