RDI | RDI Small Range | RDI Spot

Motion sensor

thermokon®
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
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Illustration similar

»APPLICATION

The ceiling motion detector detects the movement of persons indoors and can switch light as required or also provide a temperature reduction in unused rooms. The installation is inconspicuous in false ceilings because of the small design. There are 3 types available with different detection ranges.

»TYPES AVAILABLE

Ceiling sensor motion – active relay

- RDI Standard
- RDI Small Range
- RDI Spot

»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

»PRODUCT TESTING AND CERTIFICATION

CE

Declaration of conformity
The declaration of conformity of the products are available on our website
https://www.thermokon.de/direct/en-gb/categories/rdi

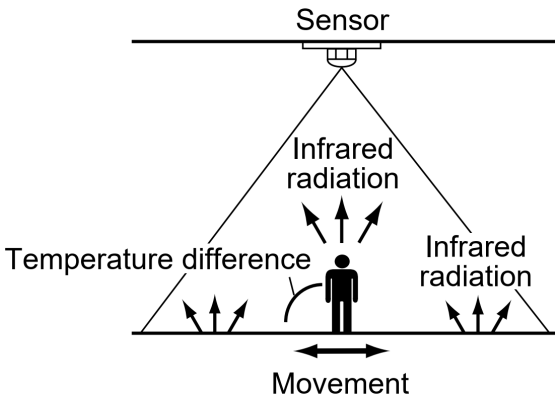
»NOTES ON DISPOSAL

The crossed-out wheelie bin symbol indicates that the product or removable batteries must not be disposed of with household or commercial waste. Within the EU, you are legally obliged to dispose of the product separately and appropriately in accordance with the national laws of your country. Alternatively, please contact your supplier or Thermokon Sensortechnik GmbH. Further information can be found at: www.thermokon.com

»TECHNICAL DATA

General

Measuring values	Motion
Output switching contact	floating contact NO for 24 V =/~, load max. 1 A (resistive), with follow-up time 8 seconds
Power supply	15..24 V = (±10%) or 24 V ~ (±10%) SELV
Power consumption	typ. 0,5 W (24 V =) | 1,1 VA (24 V ~)
Sensor	PIR (passiv infrarot)
Enclosure	ABS, pure white
Protection	IP20 according to DIN EN 60529
Cable entry	rear entry, breaking points bottom, drill mark top
Connection electrical	terminal block, max. 1,5 mm², connection wire PVC (2x0,25 mm²), length=10 cm
Ambient condition	-20..+50 °C, max. 85% non-condensing

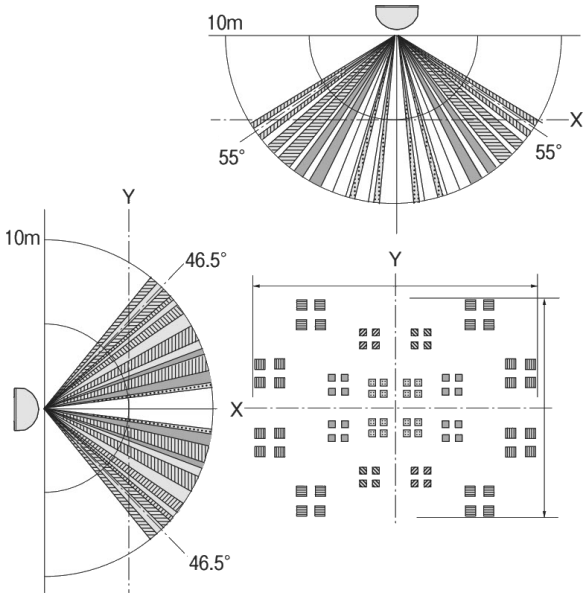


Remark: After having switched-on the operating voltage, the switch output is switched-on for approx. 30sec. in the stabilisation status of the sensor.
The specified ranges refer to average conditions at a certain installation height and are therefore to be regarded as guide values. The range can vary considerably with changing temperature conditions. The necessary temperature difference between the detectable object and the environment should be at least 4 °C. The speed of the object should be at least 0.3 to 1.0 m/s. The motion detector should not be mounted near disturbing heat sources (e.g. lamps, radiators, fans etc.) to avoid false alarms. The object to be detected must have a minimum size of 700x250 mm.

This sensor detects changes in infrared radiation that occur when a person (or object) whose temperature differs from that of the environment moves.

RDI Standard

Detection range	
Detection distance	max. 10 m
Field of view horizontal x	110°
Field of View vertical y	93°
Detection zone	80



A installation height of 2,5 m
results in a detection area of approx. 7,1x5,3 m,
divided into 80 measuring zones.

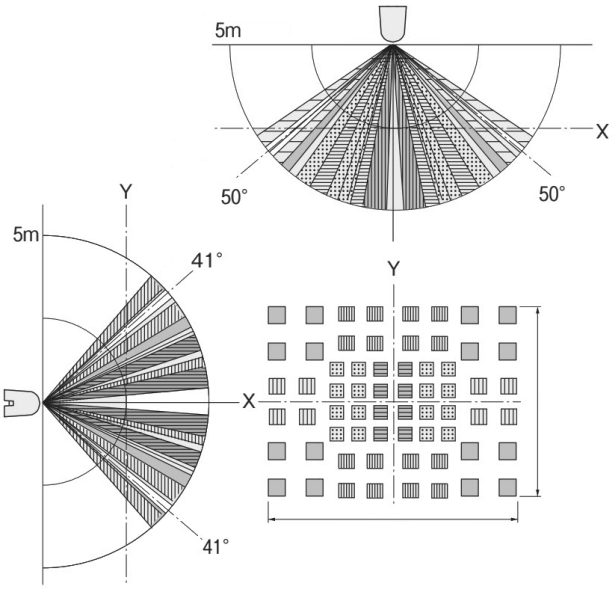
Formula:

tan (55) * installation height = radius detection range x

tan (46.5) * installation height = radius detection range y

RDI Small Range

Detection range	
Detection distance	max. 5 m
Field of view horizontal x	100°
Field of View vertical y	82°
Detection zone	64



A installation height of 2,5 m
results in a detection area of approx. 6x4,3 m,
divided into 64 measuring zones.

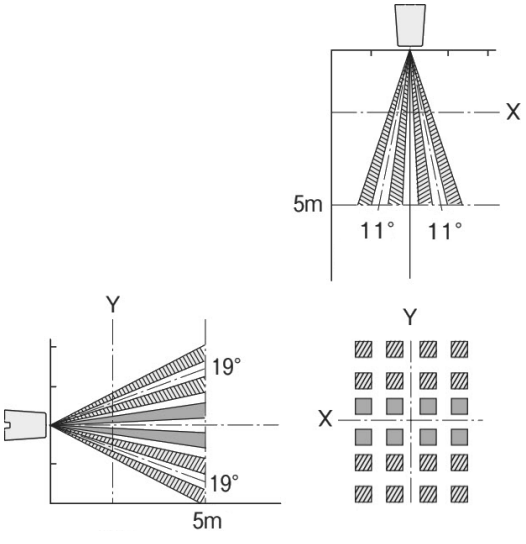
Formula:

tan (50) * installation height = radius detection range x

tan (41) * installation height = radius detection range y

RDI Spot

Detection range	
Detection distance	max. 5 m
Field of view horizontal x	22°
Field of View vertical y	38°
Detection zone	24



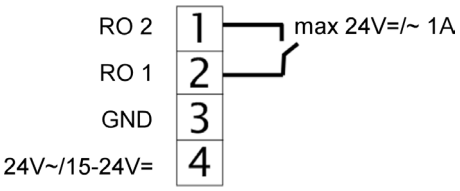
A installation height of 2,5 m
results in a detection area of approx. 1x1,7 m,
divided into 24 measuring zones.

Formula:

tan (19) * installation height = radius detection range y

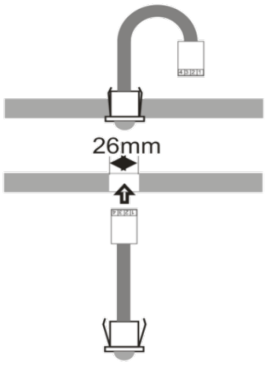
tan (11) * installation height = radius detection range x

»CONNECTION PLAN

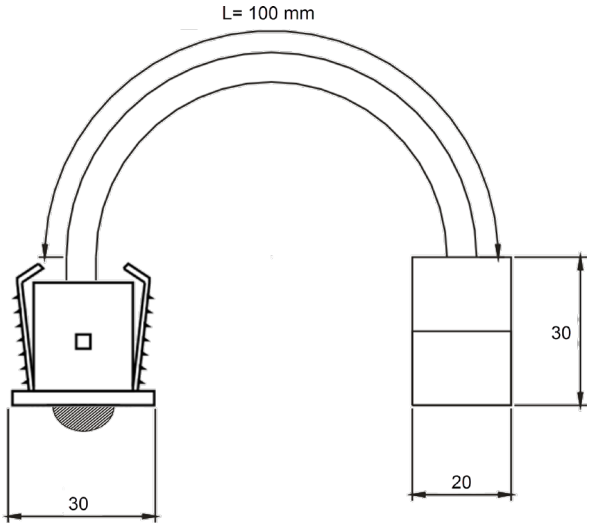


»MOUNTING ADVICES

Please make sure that the device is de-energized if you want to install it!



»DIMENSIONS (MM)



»ACCESSORIES (OPTIONAL)

Rawlplugs and screws (2 pcs. each) Item No.: 102209