

Room motion sensor and light sensor, multisensors with active and switching output

The room motion and light sensor and presence detector **KINASGARD® RBWF-LF** is a combined instrument that detects motion and light intensity using a diffuser as well as the presence of persons and is used to recognize conditions. RBWF-LF issues a standard signal of 0-10 V or 4...20 mA for light intensity and has a switching (normally open contact) output for detecting motion.

This multi-sensor is used in building automation, in corridors, at workplaces, in industrial halls, in offices and business facilities for the control of lighting as needed, e.g. to control sunshade equipment, for daylight-dependant constant light control, for activating Venetian blinds or luminaries, for automatic energy conservation, and to avoid unnecessary heating-up or cooling of unoccupied rooms.

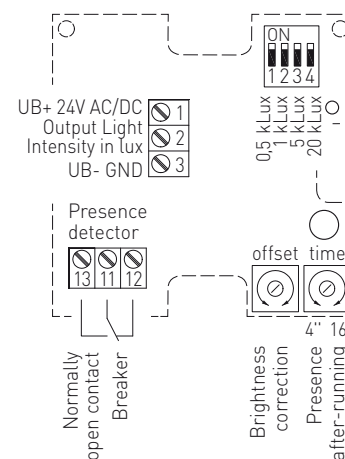
TECHNICAL DATA

Power supply:	24 V AC (±20%); 15...36 V DC for U variant 15...36 V DC for I variant, depending on working resistance, residual ripple stabilised ±0.3 V
Working resistance:	$R_a(\text{ohm}) = (U_b - 14 \text{ V}) / 0.02 \text{ A}$ for I variant
Load resistance:	$R_L > 5 \text{ kOhm}$ for U variant
Power consumption:	< 1 W at 24 V DC; < 2 VA at 24 V AC
Sensor:	infra-red motion sensor and light sensor with diffuser (see beginning of this chapter)
Output, motion sensor:	without / with motion + presence, potential-free normally open contact (24 V), 1 A ohmic load
After-running time:	adjustable from 4 s to 16 min
Measuring ranges:	multi-range switching (via DIP switches) with 4 switchable measuring ranges 0...500 Lux / 1 kLux / 5 kLux / 20 kLux (other individual ranges optional, e.g. 100 kLux)
Output, light sensor:	0-10 V (linearised, active, 3-wire connection) or 4...20 mA
Measuring error:	< 5 % of final value
Ambient temperature:	0...+50 °C
Electrical connection:	0.14 - 1.5 mm², via terminal screws on circuit board
Enclosure:	plastic, material ABS, colour pure white (similar to RAL 9010)
Dimensions:	85 x 85 x 27 mm (Baldur 1)
Installation:	wall mounting or on in-wall flush box, Ø 55 mm, base with 4-hole for mounting on vertically or horizontally installed in-wall flush boxes for cable entry from the back, with predetermined breaking point for on-wall cable entry from top / bottom in case of plain on-wall installation
Protection class:	III (according to EN 60 730)
Protection type:	IP20 (according to EN 60 529)
Standards:	CE conformity, electromagnetic compatibility according to EN 61 326, EMC directive 2014 / 30 / EU

Measuring ranges (selectable)	DIP 1	DIP 2	DIP 3	DIP 4
0...500 Lux	ON	OFF	OFF	OFF
0... 1 kLux	OFF	ON	OFF	OFF
0... 5 kLux	OFF	OFF	ON	OFF
0... 20 kLux	OFF	OFF	OFF	ON

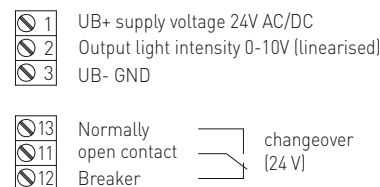
Schematic diagram

RBWF/LF



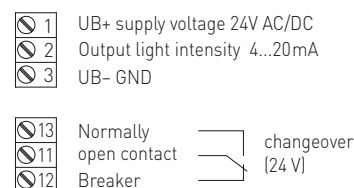
Connecting diagram

RBWF/LF-U



Connecting diagram

RBWF/LF-I





S+S REGELTECHNIK

KINASGARD® RBWF/LF

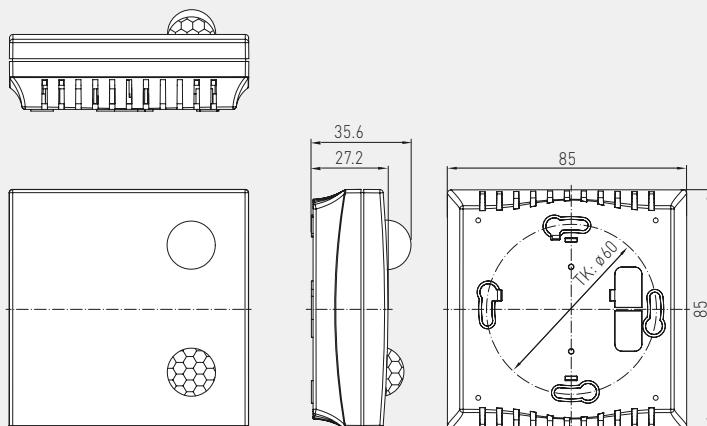
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Dimensional drawing

Enclosure **Baldur 1**
RBWF/LF

RBWF/LF



KINASGARD® RBWF/LF – Room motion sensor and light sensor

Type / WG01	Detection, Measuring Range	Output	Item No.	Price
RBWF-LF-U				
1. Presence + Motion	Yes / No (relay on / off)	Changeover contact	1401-41A1-1100-000	139,20 €
2. Light Intensity	0...500 Lux / 1 kLux / 5 kLux / 20 kLux	0 -10 V (linearisiert)		
RBWF-LF-I				
1. Presence + Motion	Yes / No (relay on / off)	Changeover contact	1401-41A1-3200-000	139,20 €
2. Light Intensity	0...500 Lux / 1 kLux / 5 kLux / 20 kLux	4...20 mA		
Extra charge:	Other individual measuring ranges optional, e. g. 100 kLux		on request	