PHOTASGARD® RHKF

Room light intensity sensors with multi-range switching and active output

S+S REGELTECHNIK

The room light intensity sensor **PHOT**ASGARD® **RHKF** with four switchable measuring ranges (four devices in one) measures the luminous intensity with a diffuser and is used to control luminaries, lighting systems, Venetian blinds and canvas blinds, etc., to monitor lighting conditions at workplaces, in storage halls, workshops and corridors, in indoor areas, in industrial halls, in offices as well as in residential and business facilities, for daylight-dependant constant light control, as light intensity or twilight sensor and to control sunshade equipment avoiding unnecessary heating-up of rooms. Therefore it minimizes your variety of types and stock keeping while covering a greater range of universal applications. The sensor used in PHOTASGARD® light intensity sensors was specifically adapted to the sensitivity of the human eye. Its greatest sensitivity is in the range of 400 nm to 700 nm. With its special filter, the sensor is therefore ideally suited for measuring exposure to daylight and / or for measuring artificial light of high colour temperature (similar to sunlight).

RHKF

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 (ohm) = (U_b -14 V) / 0.02 A for I variant
Load resistance:	R_L > 5 kOhm for U variant
Power consumption:	< 1 W at 24 V DC; < 2 VA at 24 V AC
Sensor:	light sensor with diffuser
Measuring ranges:	**multi-range switching** (via DIP switches) **0...500 Lux / 1 kLux / 5 kLux / 20 kLux** (other individual ranges optional on request)
Output:	4...20 mA or 0-10 V (2- or 3-wire connection)
Accuracy:	typically < 5 % of final value
Ambient temperature:	0...+50 °C
Electrical connection:	0.14 - 1.5 mm², via terminal screws
Housing:	plastic, flame retardant (UL 94 V-0), PC/ABS material, colour white (similar to RAL 9016)
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:	**IP 30** (according to EN 60 529)
Standards:	CE conformity according to 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** (default)	OFF	**ON**	OFF	OFF
0... 5 kLux	OFF	OFF	**ON**	OFF
0... 20 kLux	OFF	OFF	OFF	**ON**

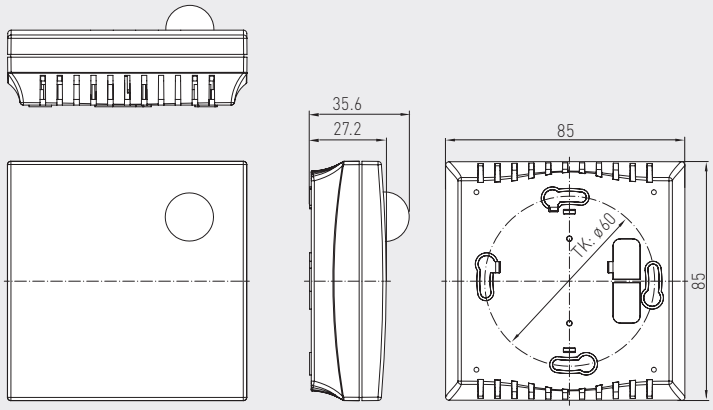
Connecting diagram **RHKF-U**

UB+ supply voltage 24V AC/DC
Output light intensity 0-10V
UB– GND

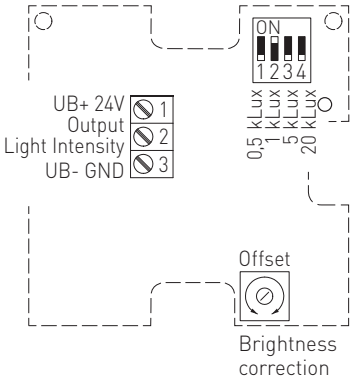
Connecting diagram **RHKF-I**

UB+ supply voltage 24V DC
Output light intensity 4...20mA

Dimensional drawing — Housing **Baldur 1** **RHKF**



Schematic diagram **RHKF**



PHOTASGARD® RHKF Room light intensity sensors

Type / WG01	Measuring Range Light Intensity (adjustable)	Output Light Intensity	Item No.	Price
RHKF				
RHKF-I	0...500 Lux / 1 kLux / 5 kLux / 20 kLux	4 ... 20 mA	1601-41A2-2000-000	**107,95 €**
RHKF-U	0...500 Lux / 1 kLux / 5 kLux / 20 kLux	0-10 V	1601-41A1-2000-000	**107,95 €**
Extra charge:	other individual measuring ranges optional		on request	