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

The room motion and light sensor and presence detector  $KIN \mbox{ASGARD}^{\circledast} \ ABWF / LF$ is a combined instrument that detects motions and light intensity as well as the presence of persons and is used to recognize conditions. ABWF/LF issues a standard signal of 0-10V or 4...20mA for light intensity and has a switching (changeover contact) output for the detection of motions.

The motion sensor/presence detector detects the presence of persons and motions. It is used to monitor and recognise conditions and for motion-dependent control of room functions, e.g. as a motion detector to lower temperatures in unused rooms. The motion sensor is used in corridors, in outdoor areas, in industrial halls, in offices, residential rooms and business facilities.

The light intensity sensor / twilight sensor with six switchable measuring ranges (six devices in one) measures the luminous intensity and is used to control luminaries, lighting systems, Venetian blinds and canvas blinds, etc., to monitor lighting conditions at workplaces, in greenhouses, storage halls, workshops, corridors, in outdoor 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.

## TECHNICAL DATA

Power supply:	$24V$ AC ( $\pm20\%$ ); 1536 V DC for U variant 1536 V DC for I variant, depending on working resistance, residual ripple stabilised $\pm0.3V$			
Working resistance:	$R_{a}(ohm)$ = (U_{b}-14V) $/$ 0.02A 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:	infra-red motion sensor and light sensor (see beginning of this chapter)			
Output, motion sensor:	without/with motion + presence, potential-free normally open contact (24V), 1A ohmic load			
After-running time:	adjustable from 4 s to 16 min			
Measuring ranges:	<b>multi-range switching</b> (via DIP switches) <b>O500 Lux / 1 kLux / 2 kLux / 5 kLux / 20 kLux / 60 kLux</b> (other individual ranges optional, e.g. 100 kLux)			
Output:	0-10V (linearised, active, 3-wire connection) or 420mA			
Deviation, light sensor:	typically $< 5\%$ of final value			
Ambient temperature:	-10+50 °C			
Electrical connection:	0.14 - 1.5 mm², via terminal screws			
Housing:	plastic, UV-resistant, material polyamide, 30% glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL9016)			
Housing dimensions:	72 x 64 x 37.8 mm (Tyr 1)			
Cable connection:	<b>cable gland</b> , plastic (M 16 x 1.5; with strain relief, exchangeable, inner diameter 10.4 mm) <b>or</b> <b>M12 connector</b> according to DIN EN 61076-2-101 (optional on request)			
Installation:	on-wall			
Protection class:	III (according to EN 60730)			
Protection type:	IP 65 (according to EN 60529) housing tested, TÜV SÜD, report no. 713139052 (Tyr 1)			
Standards:	CE conformity, electromagnetic compatibility according to EN 61326, EMC directive 2014/30/EU			



OFF

OFF

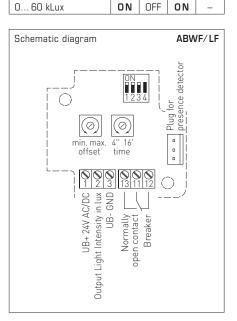
ON

0...

0...

Ο..

0... 20 kLux (default)

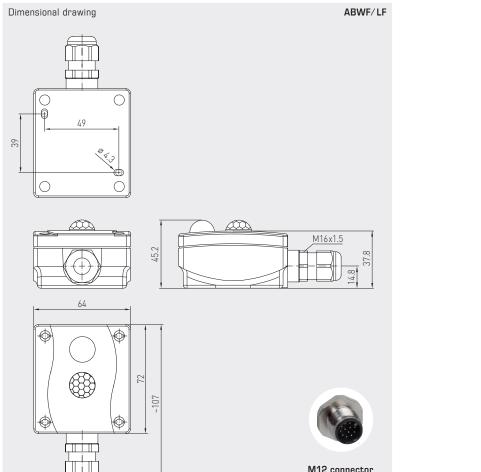


Connect	ing diagram	ABWF/LF-U			
<ul> <li>● 1</li> <li>● 2</li> <li>● 3</li> </ul>	UB+ supply voltage 24V A Output light intensity 0-1 UB- GND				
<ul><li>●13</li><li>●11</li><li>●12</li></ul>		changeover [24 V]			
Connecting diagram ABWF/LF-I					
<ul> <li>♥ 1</li> <li>♥ 2</li> <li>♥ 3</li> </ul>	UB+ supply voltage 24V A Output light intensity 4 UB- GND	AC/DC			
<ul> <li>♥ 1</li> <li>♥ 2</li> <li>♥ 3</li> </ul>	UB+ supply voltage 24V A Output light intensity 4 UB- GND	AC/DC			

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M12 connector (optional on request)

KINASGARD® ABWF/ LF	<b>F</b> Outdoor motion sensor and light sensor					
Type/WG01	Detection, Measuring Range	Output	ltem No.	Price		
ABWF-LF-U						
1. Presence + Motion	Yes/No (relay on/off)	Changeover contact	1401-1111-2100-000	175,35 €		
2. Light Intensity	0500 Lux / 1 / 2 / 5 / 20 / 60 kLux	<b>0 - 10V</b> (linearised)				
ABWF-LF-I						
1. Presence + Motion	Yes/No (relay on/off)	Changeover contact	1401-1111-3200-000	175,35 €		
2. Light Intensity	0500 Lux / 1 / 2 / 5 / 20 / 60 kLux	420mA (linearised)				
Extra charge:	Other individual measuring ranges optional,	on request				
Optional:	Cable connection with M12 connector accor	on request				

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