Installation Instructions

Swiss Garde Hokuspokus KNX/KLR

Züblin

KNX®

Edition 06-2018

Presence detector 360° KNX/KLR

Ultra-flat mini KNX presence detector with constant light control

The presence detector **Swiss Garde Hokuspokus KNX/KLR** is characterised by the following outstanding features:

- **2 -channel constant light control**
  The in-built 2-channel constant light control can be easily adjusted to meet any customer's needs.
  The two light channels can be controlled via a parametrizable offset
  (-50%, synchronous, +50%) using different light values.

- **1 light output** for switching, dimming or scenery selection.

- **Standby light**
  If the light channel is set to *dimming absolute*, an emergency standby light can be programmed using the standby value [%] and standby duration [min/h]. Two value pairs can be read out from the KNX bus.

- **1 HVAC-channel** controls heating, ventilation and air conditioning. This output can be used for presence detection.
  Additionally, alarm systems with parametrizable switch-on delay can be implemented.

- **1 brightness output** in lux (2 Byte)

- **2 Pyro detectors**
  Two PIR sensors with an elliptic 360° detection area can be activated individually or in pairs.

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Important notice

The presence detector Swiss Garde Hokuspokus KNX/KLR is suitable for ceiling mounting and for IP54, class II protection rating. In case of errors such as continuous light, uncontrolled switching, etc., please consult page 7 „troubleshooting".

Function

The presence detector Swiss Garde Hokuspokus KNX/KLR reacts to heat radiation of moving bodies. A person approaching the monitored area automatically triggers the connected light. If no motion is detected again, the light will automatically switch off after a delay time configured in ETS. In case of activated standby, the light will stay on at reduced intensity during the set time period (mode *dimming complete / constant light control*).
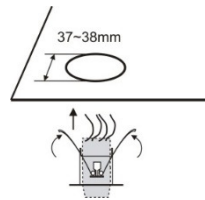
Application notes

A detailed description of the communication objects and all parametrizable functions can be found in the following separate document:

Swiss Garde Hokus Pokus KNX/KLR
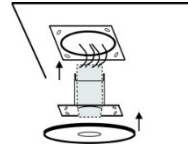
APPLICATIONDESCRIPTION

Flush-mounting execution
Mounting of the detector in a cut-out.
Ensure that connecting cables are
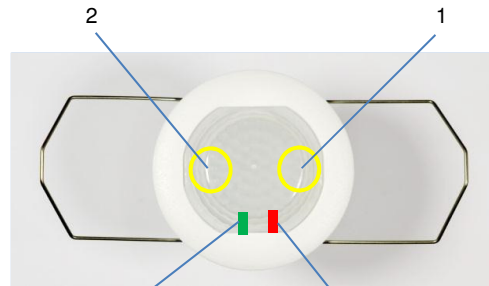not exposed to tension or mount strain
relief.

Flush-mounting box DA
Using the DA flush-mounting box, the
Hokuspokus KNX/KLR detector can be
mounted in a standard flush-mounting
box or cut-out size l.

PIR- sensors numbering scheme / LEDs

2   1

LED motion;   **LED** programming;
flashes once with   glows if device is in
each detection   programming mode

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Connector plugs

The presence detector Hokuspokus KNX/KLR comes with a special pair of connector plugs.
The spring plug is mounted on the detector's connection cable. The connector needs to be connected to the green KNX bus cable (red/black connection wires).

Connector   Spring plug (on detector)

Installation

Open the housing of the connector carefully and strip the wires of the KNX bus cable (8 mm length).

red wire (+) to be connected to red terminal
black wire (-) to be connected to black terminal
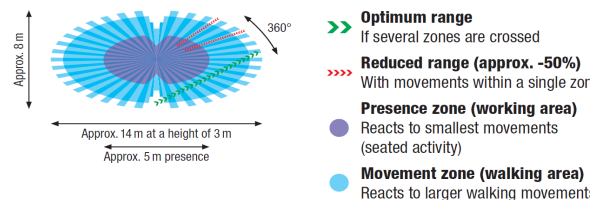
Programming

Run the magnet gently across the lens to enter programming mode (red LED is glowing). The detector's physical address can now be programmed (via ETS).
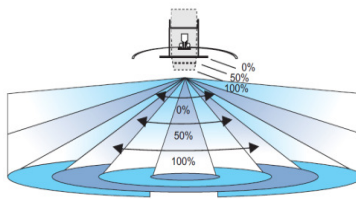
Detection range

The dense 360° elliptic detection area allows for an optimal function. The range depends on the mounting height as well as the angle of approach (high sensitivity when crossing a switching segment). Since the device registers the temperature differences between the source of heat and the ambient temperature, the detection range may vary depending on site conditions (floor heating, etc.).

View from top

Approx. 8 m
360°
Approx. 14 m at a height of 3 m
Approx. 5 m presence

Optimum range
If several zones are crossed

Reduced range (approx. -50%)
With movements within a single zon

Presence zone (working area)
Reacts to smallest movements (seated activity)

Movement zone (walking area)
Reacts to larger walking movement

Side view
Detection range / opening angle depended on sensor insertion depth

0%
50%
100%

heigh	range
2.5 m	10 m max.
3.0 m	12 m max.
3.5 m	14 m max.
4.0 m	16 m max.

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Troubleshooting

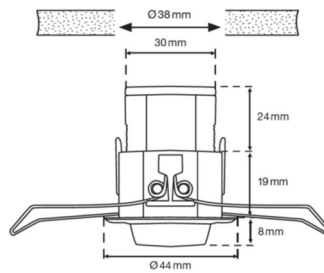| Error	Cause/remedies
load doesn`t switch ON	• twilight value set to high
	• check light/luminaire/fuses
Detector triggers ON and OFF without reason or light never turns OFF:	• check detection area for potential causes of false triggering: animals, heating, etc. may all doing faulty switching
	• check distances to lamps (heat-reflection or direct light influence)
	• detector is to sensitive, reduce the detection range sensitivity (1…10) via ETS.
Turns the ON during day-time:	• twilight adjustment set to high: set to a lower value via ETS (menu light)

After KNX/EIB bus connection: the detector takes approx. 1 min. to reach a stable working condition!

Device dimension

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Technical data

nominal voltage:	24V DC (21 - 30V DC)
power consumption:	0,3 W
PIR sensors:	2 Pyro detectors
sensitivity:	adjustable via ETS in 10 steps
light measuring:	5 - 2000 Lux
lux value:	lux value readable (2 Byte)
switiching criteria:	motion and brightness
detection range:	360° elliptic
presence range:	approx. 5 m radius; approx. 14 m length, 8 m with at 3 m height
recom. mounting height:	approx. 2 to 5 m
protection rating:	IP 54, class II
temperature range:	-20 °C to +40 °C
dimensions:	Ø 44 x 1- 8mm, visible in the ceiling
drilling hole:	Ø 38 mm
settings:	all values parametrizable via ETS

Swiss Garde Hokuspokus KNX/KLR

Item No.	model	EAN
25010	SG Hokuspokus KNX/KLR	3505100250104
25013	flush- mounting box DA	3505100250135

Electrical devices can`t disposed in domestic waste.
Delivery of old or defective equipment at public collection points or return to the point of sale.

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