

Installation Instructions

Swiss Garde 300 Presence KNX/KLR



niko



Edition 09-2022

Art.-Nr. 25240CH, 25240D, 25241, 25242, 25245, 25248

Presence detector 180° KNX/KLR

for wall mounting, with constant light control

The detector **Swiss Garde 300 Presence 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)
- **3 Pyro detectors**
Three PIR sensors detect an area of 180° horizontally and 90° vertically. They are switchable individually or in groups.

Important notice

The presence detector Swiss Garde 300 Presence KNX/KLR is suitable for wall mounting indoors only. In case of errors such as continuous light, uncontrolled switching, etc., please consult page 7 „troubleshooting“.

Function

The presence detector Swiss Garde 300 Presence 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*).

Installation

The ideal mounting height is 1 to 2.2 m. Connect the presence detector as follows:

red wire (+) to be connected to red terminal

black wire (-) to be connected to grey terminal

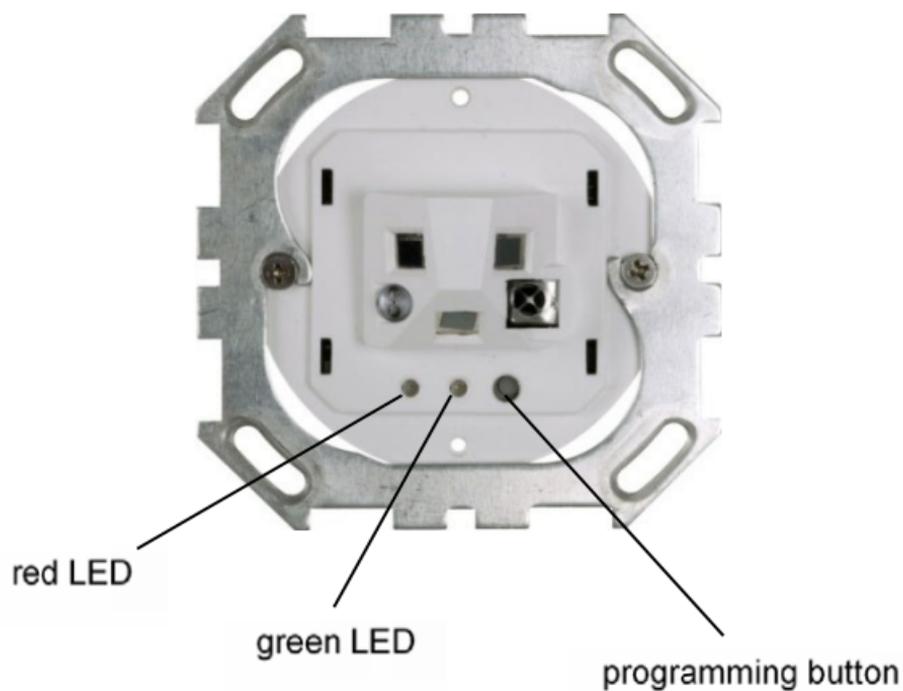
Application notes

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

Swiss Garde 300 Presence KNX/KLR (25240CH and 25240D)

APPLICATION NOTES

**Swiss Garde 300 CH Presence KNX/KLR
frontal view CH- version 25240CH**



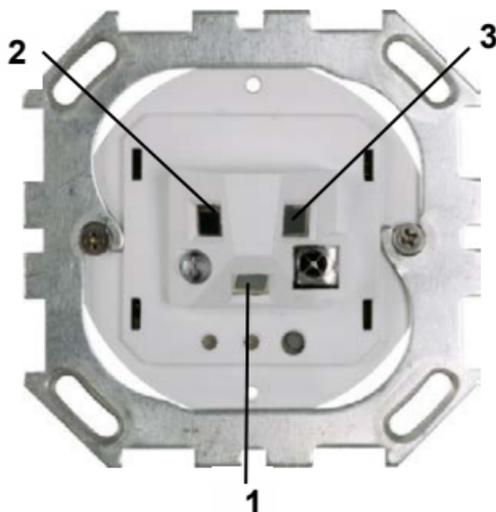
Swiss Garde 300 D Presence KNX/KLR rear view 25240D

bus terminal - bus terminal +



rating plate

PIR sensors numbering scheme

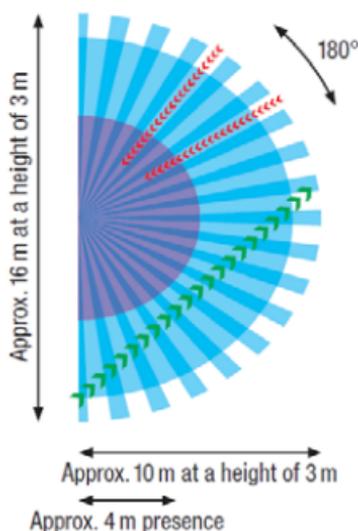


The PIR sensors 1 2 3 can be activated via ETS individually or in groups, using the above numbering scheme.

Detection range

The 180° horizontal and 90° vertical detection range as well as the dense detection area allow 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



- >>> Optimum range**
If several zones are crossed
- >>>> Reduced range (approx. -50%)**
With movements within a single zone
- Presence zone (working area)**
Reacts to smallest movements
(seated activity)
- Movement zone (walking area)**
Reacts to larger walking movements

Troubleshooting

Error

load doesn't switch ON

Detector triggers ON and OFF without reason or light never turns OFF:

Turns the ON during day-time:

Cause/remedies

- twilight value set to high
- check light/luminaire/fuses
- 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 too sensitive, reduce the detection range sensitivity (1...10) via ETS.
- 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!

Technical data

nominal voltage:	24V DC (21 - 30V DC)
power consumption:	0,5 W
PIR sensors:	3 Pyro detectors
sensitivity:	adjustable via ETS in 10 steps
light measuring:	5 - 2000 Lux
lux value:	lux value readable (2 Byte)
switching criteria:	motion and brightness
detection range:	180° wall mounting
presence range:	4 m radius
motion range:	8 m radius
recom. mounting height:	1m to 2,2 m
KNX connection:	2 pin bus terminal, for wires Ø 0,6 to 0,8 mm
protection rating:	IP 20 indoor mounting, class II
temperature range:	0°C to + 40°C
dimensions:	80 x 80 x 53 mm 25240D 88 x 88 x 53 mm 25240CH

Swiss Garde 300 Präsenz KNX/KLR

Item no.	Model	EAN
25240CH	SG 300 P KNX/KLR version CH	3505100252405
25240D	SG 300 P KNX/KLR version EU	3505100252405

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PM25240CH-ENR22381