niko

KNX®

Instruction Manual

Swiss Garde 360 Presence KNX/KLR RA

Item no.	Model	EAN
(351-) 25032	SG360KNX/KLR RA 16 m	3505100250326
(351-) 25034	SG360KNX/KLR RA 16 m EB	3505100250340
(351-) 25036	SG360KNX/KLR RA 30 m	3505100250364

Presence detectors 360° KNX/KLR RA/EA
for ceiling flush-mounting

The family of **Swiss Garde 360 Presence KNX/KLR RA/EA**
presence detectors 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 Threshold switch** in lux with hysteresis setting

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

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

Important notice

The presence detectors Swiss Garde 360 Presence KNX/KLR RA/EA/EB is suitable for ceiling 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 360 Presence KNX/KLR RA/EA/EB 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

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 360 Presence KNX/KLR RA/EA/EB

APPLICATION NOTES
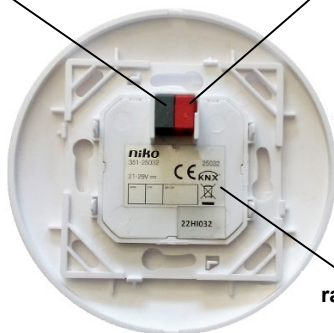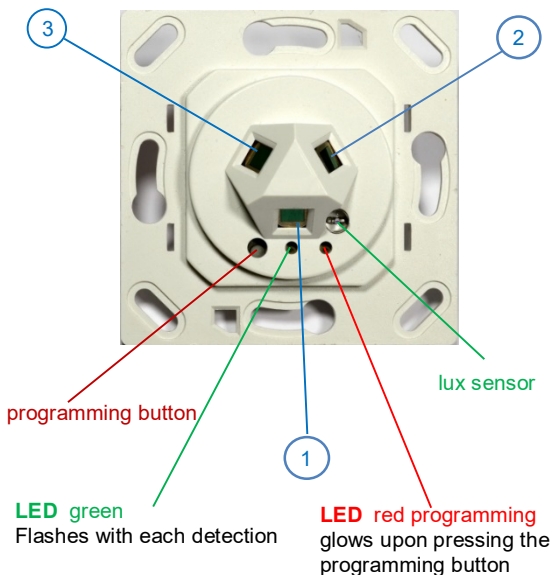
SG360P KNX/KLR RA 16m (351- 25032)

frontal view

rear view

bus terminal – (grey)

bus terminal + (red)

rating plate

PIR sensors numbering

programming button

lux sensor

LED green
Flashes with each detection

LED red programming
glows upon pressing the
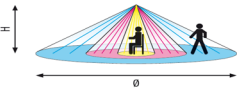programming button

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

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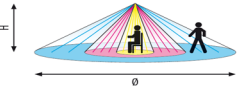approx. 1 min. to reach a stable working condition!**

Detection range

The 360° omnidirectional 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.).
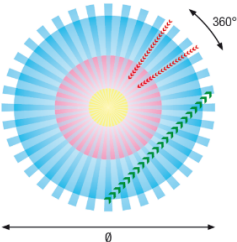

SG360P KNX/KLR RA 16m (16m lenses)

H	Ø ★ 🚶(seated)	Ø ★ 🚶(walking)
2,0 m	4 m	10 m
2,5 m	5 m	12 m
3,0 m	6 m	14 m
3,5 m	7 m	16 m
4,0 m	(8 m)	16 m
5,0 m	(8 m)	16 m
6,0 m	(8 m)	16 m

SG360P KNX/KLR RA 30m (30m lenses)

H	Ø ★ 🚶(seated)	Ø ★ 🚶(walking)
2 m	5 m	20 m
3 m	7 m	26 m
4 m	9 m	28 m
5 m	(10 m)	30 m
6 m	(10 m)	30 m
7 m	(10 m)	30 m
8 m	(10 m)	30 m

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

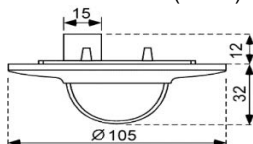| Error	Cause/remedies
load doesn`t switch ON	• twilight value set to high
	• check light/luminaire/fuses
Detector triggers ON and OFF without reason or light never turns OFF:	• check detection area for potential causes of false triggering: animals, heating, etc. may all doing faulty switching
	• check 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)

Device dimensions

execution **RA** 16m (round)

execution **RA** 16m **EB**

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Technical data

nominal voltage:	24V DC (21 - 30V DC)
power consumption:	0,4 W
PIR- sensors:	3 Pyro detectors
sensitivity:	adjustable via ETS in 10 steps
light measuring:	brightness sensor with linear output
lux value:	value readable (5 - 2000lux, 2 Byte)
switiching criteria:	motion and brightness
detection range:	360°, ceiling mounted
range height= 3m/ **RA 16m:**	Ø6m presence, Ø14m motion
range height= 3m/ **RA 30m:**	Ø7m presence, Ø26m motion
recom. mounting height:	2m – 6m (25032, 25034)
	2m – 8m (25036)
mounting:	ceiling or false- ceiling mounting
available accessory:	AP/UP- housing, IP55 -housing
protection rating:	IP 20, indoor mounting, class II
temperature range:	- 20°C bis +40 °C
dimensions:	**RA** 16 m: Ø105 x 44 mm
	RA 30 m: Ø105 x 51mm
	RA 16 m **EB**: Ø105 x 51 mm

Warnings regarding installation

The installation of products that will permanently be part of the electrical installation and which include dangerous voltages, should be carried out by a qualified installer and in accordance with the applicable regulations. This user manual must be presented to the user. It should be included in the electrical installation file and it should be passed on to any new owners. Additional copies are available on the Niko website or via Niko customer services.

CE marking

This product complies with all of the relevant European guidelines and regulations. For radio equipment Niko llc declares that the radio equipment in this manual conforms with the 2014/53/ EU directive. The full text of the EU declaration of conformity is available at www.niko.eu under the product reference, if applicable.

Environment

This product and/or the batteries provided cannot be disposed of in non-recyclable waste. Take your discarded product to a recognised collection point. Just like producers Niko llc declares that importers, you too play an important role in the promotion of sorting, recycling and reuse of discarded electrical and electronic equipment. To finance the rubbish collection and waste treatment, the government levies recycling charges in certain cases (included in the price of this product).