SEN-3B-KO

PIR OCCUPANCY/DAYLIGHT SENSOR

OVERVIEW

The SEN-3B-KO is a two-way IR remote programmable line voltage switching occupancy sensor with 0-10V output for dimmable ballast or LED driver control. The sensor is capable of providing top-notch energy efficient lighting control in multiple modes with fully programmable multi-level high/low dim or continuous dimming control. The SEN-3B-KO features state-of-the-art automatic dimming control technology, which is capable of maintaining the overall ambient light level within the preset range through a smooth, flawless continuous dimming control to the connected lighting.

The sensor will turn on the connected lighting to the high dim or continuous dimming level as programmed when it detects the presence of an occupant or vehicle, and automatically dim the light down to the low level or shut off as programmed after the area is vacated for a period of time. An exclusive two-way handheld remote programmer (SEN-3-RC) allows you to configure sensor setting, or download the existing settings of the installed sensor from the floor. In addition, an exclusive Hybrid Switching technology makes the SEN-3B-KO a perfect sensor to control a group of LED lightings with exceptionally high inrush current (HIC) while switching on.

The SEN-3B-KO is available with various mounting options and interchangeable lenses. This provides a second-to-none design and complete installation flexibility. The sensor is designed to operate in the coldest of environments, down to -40°F/°C.

FEATURES

- Omni-directional quad element infrared sensor
- Digital data control ambient light sensor built-in
- 2-way IR remote programmable sensor setting
- Hybrid switching for controlling loads with HIC
- Continuous dim or multi-level high/low dim control
- Remote programmable continuous dim level setting
- Up to 30 ft of remote programmable range
- Beeping or light flashing acknowledgement
- Available with a variety of mounting options
- Available with interchangeable lens options
- 5 Year Limited Warranty; see eiko.com for warranty details

APPLICATION

The SEN-3B-KO sensor can be used to provide occupancy sensing based, multi-mode, continuous dimming control by sensing the presence and movements of the occupant and the daylight available in the space. Specific control mode and sensor setting can be configured via the SEN-3-RC remote sensor programmer (sold separately). Within the maximum load allowed, one SEN-3B-KO sensor can control up to 50 dimmable ballasts/drivers with sinking current less than 0.5mA each. Basic wiring diagram is included at next page for reference. Consult with an EiKO team member if a more complex control is required.

DIMMING

The SEN-3B-KO utilizes an exclusive continuous dimming control algorithm that provides a smooth and flawless automatic dimming performance. The output of the controlled lighting will be constantly adjusted to maintain the overall ambient light level within the pre-programmed range by sensing the daylight available in the space.

CONTROL MODES

The SEN-3B-KO can be programmed by SEN-3-RC to control the lighting in one of the following modes with various conditions as set. For more details of specific control mode, please visit eiko.com or contact an EiKO team member directly.

ON/OFF : ON/OFF switching
OSO : Occupancy sensing only
OSLA : Occupancy sensing at low ambient
OSLATO : Occupancy sensing at low ambient with time-off

Mode	Day[1]	Night[2]	Remarks
ON/OFF	Vac: OFF Occ: ON/OFF*	Vac: OFF Occ: ON	For non-dimmable lighting *ALS enabled
OSO	Vac: LD Occ: SD/HD	Vac: LD Occ: SD/HD	LD: Low dim; HD: High dim SD: Continuous dim
OSLA	Vac: OFF Occ: OFF/SD	Vac: LD Occ: SD/HD	
OSLATO	Vac: OFF Occ: OFF/SD	Vac: OFF Occ: HD/SD-LD*	*Low dim during time off delay

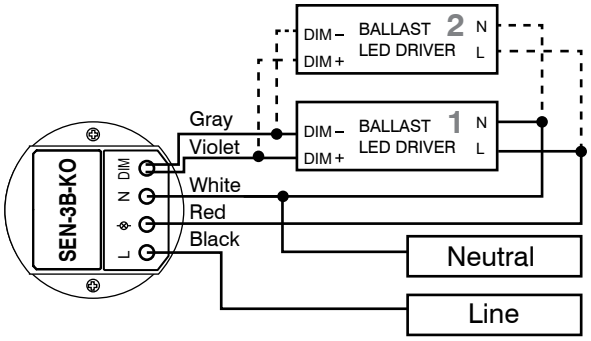
Vac: Vacant Occ: Occupied
[1] While ambient light level is higher than the threshold
[2] While ambient light level is lower than the threshold

LENS OPTIONS

The SEN-3B-KO is available with following lens options which provide different coverage at different mounting height (H). When adding the lens code, the lens is then automatically shipped with the sensor.

	Lens	Shape	Mounting Height		Coverage
SEN-3-Lens-HBS	High bay	Cone	15 ~ 30 ft.	4.5 ~ 9.0m	3X height
SEN-3-Lens-HBH	High bay	Dome	30 ~ 50 ft.	9.0 ~ 15.0 m	4X height
SEN-3-Lens-Aisle	Aisle way	Arch	8 ~ 40 ft.	2.4 ~ 12.0m	3X height
SEN-3-Lens-EW4X	Extra wide	Dome	8 ~ 20 ft.	2.4 ~ 6.0m	4X height

WIRING DIAGRAM



SPECIFICATIONS

Power supply	120/277VAC, 50/60Hz
Maximum load @ -40°F ~ 131°F (-40°C ~ 55°C)	Incandescent/Halogen - 800/1200W(VA)@120/277V
	Fluorescent Ballast/CFL - 800/1200W(VA)@120/277V
	Ballast Electronic (LED) - 540/1200VA@120/277V
Maximum load @ 131°F ~ 158°F (55°C ~ 70°C)	Incandescent/Halogen - 500/750W(VA)@120/277V
	Fluorescent Ballast/CFL - 500/750W(VA)@120/277V
	Ballast Electronic (LED) - 500/750VA@120/277V
Infrared sensor	Omni-directional quad element pyroelectric
Photo sensor	Digital ambient light sensor
HIC protection	Max. 80A for 16.7msec.
Dim control output	0-10V, max 25mA sinking current
Detectable speed	1~10 ft./sec. (0.3~3 m/sec)
Mounting height	Subject to the lens type applied
Detection range	Subject to the lens applied and height
Remote range	33 ft. (10m) indoor, no backlight
Op. humidity	Max. 95% RH
Op. temperature	-40°F~158°F (-40°C~70°C)
Dimensions	Ø2.36"x H1.45"(Ø60 x H37mm)

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