english

thebenHTS®

PresenceLight compact ECO-IR

Presence detector

SYSTEMS FOR TIME, LIGHT, CLIMATE

Program overview

PresenceLight series

For cost-effective applications in small rooms, corridors and wet rooms.

P. 8-9

230 V | IP 54

Ceiling

5x5m
7x7m
Ø 7m/10m

Wall

Ø16m

Compact series

For convenient applications in offices, meeting and recreation rooms and/or halls and corridors

230 V P.10-13, 20-21 | EIB/KNX P. 22-23 | 24 V P. 28-31

Ceiling

5x5m
7x7m
Ø 7m/10m

Corridor ceiling

30x4m

ECO-IR series

For large-area applications in classrooms, offices and public areas

230 V P. 14-19 | EIB/KNX P. 24-27 | 24 V P. 32-33

Ceiling

8x8m
10x10m
Ø 11m/14m

Wall

Ø16m

Remote control

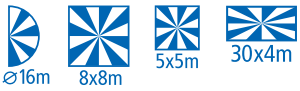
Quick-Set plus
Service remote control for the electrician

P. 35

clic
User remote control for maximum comfort

P. 35

Symbol explanations

	Wall or ceiling installation
	Detection range (observe installation height on datasheet)
	"Light" switching output reacts to presence and brightness, auto-learning
	Light output with either controlled or daylight-dependent switched light
HKL	"Presence/HKL" switching output reacts to presence
	"1–10 V interface" for dimming the lighting or constant light control
	"Analogue output 0–10 V" proportional to brightness (e.g. for SPS)
	"Bright/dark" output function as twilight switch
	Brightness output (Lux)
	Switch-on peak limit for electric ballasts reduces peaks and preserves switching contacts
	Illuminant: FL/PL/halogen lamps (incandescent lamps)
 auto/ man	Manual control with switches; fully/semi-automatic mode
	Conventional parallel installation limited manual control
	Master-slave, master-master parallel installation, manual control possible; standard switching behaviour, reduced installation expenditure
	"QuickFix" ceiling installation set for mounting in false and concrete ceilings
	Service remote control "QuickSet plus" for quick, convenient start-up; user remote control "clic" (switching, dimming, scene control)
room/corridor reg. on/reg. off	Staircase function for corridor constant lighting control/manual dimmer control
	Room monitoring for high false alarm security
	Pulse function for controlling automatic staircase lights
IP 54 	IP 54 protection rating for installation in wet zones

Model comparison by areas of application



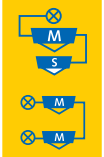
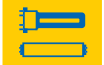
Switching 230 V

		Installation	Detection range	Switching output	Parallel installation	Manual control	Lamps	Switch-on peak	Remote control	QuickFix installation set	Additional functions	Order number	Page number
	Presence Light 360		5x5m Ø 7m								IP 54	200 0 000	P. 8-9
	Presence Light 180		⌀16m									200 0 050	P. 8-9
	compact passage		30x4m	HKL		auto/ man						201 0 090	P. 10-11
	compact office		5x5m Ø 7m								room/ corridor	201 0 000	P. 12-13
	ECO-IR 180A		⌀16m									202 0 050	P. 14-15
	ECO-IR 360A		8x8m Ø 11m	HKL								202 0 000	P. 14-15
	ECO-IR 360C NT		8x8m Ø 11m	HKL		auto/ man		EVG			room/ corridor	202 0 400	P. 16-17
	ECO-IR DUAL-C NT		8x8m Ø 11m									202 0 401	P. 18-19

Dimming 230 V

		Installation	Detection range	Switching output	Parallel installation	Manual control	Lamps	Switch-on peak	Remote control	QuickFix installation set	Additional functions	Order number	Page number
	compact office DIM		5x5m	1–10V		auto/ man					reg. on/ reg. off	201 0 001	P. 20-21

EIB/ KNX

		Installation	Detection range	Switching output	Parallel installation	Manual control	Lamps	Switch-on peak	Remote control	QuickFix installation set	Additional functions	Order number	Page number
	compact office EIB		 5x5m Ø 7m	 2x HKL		 auto/ man						201 9 200	P. 22-23
	ECO-IR 180EIB-AC		 ⌀16m	 HKL		 auto/ man						202 9 250	P. 24-25
	ECO-IR 360EIB-AC		 8x8m Ø 11m									202 9 201	P. 24-25
	ECO-IR DUAL-EIB		 8x8m Ø 11m									202 9 200	P. 26-27

24 V

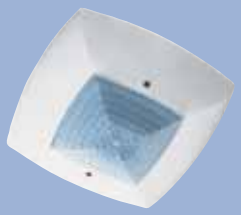
		Installation	Detection range	Switching output	Parallel installation	Manual control	Lamps	Switch-on peak	Remote control	QuickFix installation set	Additional functions	Order number	Page number
	compact office 24V		 5x5m Ø 7m	 HKL								201 4 000	P. 28-29
	compact office 24V Lux		 5x5m Ø 7m	 0–10V								201 4 001	P. 30-31
	ECO-IR 180-24V		⌀16m	HKL								202 4 050	P. 32-33
	ECO-IR 360-24V		8x8m Ø 11m									202 4 000	P. 32-33

Remote control

	QuickSet plus Service remote control	• Infrared remote control for the convenient start-up of HTS presence sensors • The service remote control QuickSet plus for the electrician enables efficient start-up and flexible adaptation to new applications.	907 0 532	P. 35
	clic User remote control	• Infrared remote control for Theben HTS presence sensors • The user remote control clic features 2 channels for controlling 2 light groups. • clic enables the switching and dimming of up to 2 light groups.	907 0 515	P. 35

Example of use in individual offices

Low operating costs and high degree of flexibility with compact office presence sensors



- At Oerlikon Assembly Equipment (ESEC), developers of high-quality chip positioning machines, flexible working hours requires a high state of readiness in the building technology. The idea of switching the lighting off in all the buildings at 8 pm with a "centralised OFF" command does not meet requirements as is clearly shown by the facade being illuminated all night long. During the current renovation work a centralised control system was rejected for reasons of cost and a decentralised light control system with Theben HTS presence sensors was chosen instead.

- The user can manually switch the lights on or off in individual offices or meeting rooms at any time. The compact office presence sensor has an input for conventional sensors or switches for this purpose. The benefits are obvious; manual override offers optimal working conditions with the maximum possible energy savings.

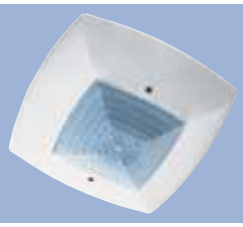
- Compact office is very flexible. While a single presence sensor provides automatic light control in small offices, two sensors are used in larger offices and meeting rooms. Both sensors control two sets of lights with two different light switching values and joint presence detection using a master-master parallel circuit.

- QuickSet plus allows the presence sensors to be installed quickly and efficiently. The electrician estimates saving around two hours for installing the first 40 presence sensors. And the client benefits - despite the building being rented - from considerable savings in running costs.

Further references:
District health office, 24837 Schleswig, GER
Stadthaus 2, 48143 Münster, GER
VCS Coburger Sparkasse, 96450 Coburg, GER

Example of use in open-plan offices

Light control in open-space offices with the compact office DIM presence sensor



- SFS Intec AG, part of the worldwide SFS group with 3,600 employs, uses Theben HTS presence sensors with constant lightcontrol in its new building. The building has space for 220 employees in open-plan offices on four floors. A total of 280 presence sensors were installed.

- The integration of various services and departments in one building poses the planners and users with several challenges. A dual cell structure was chosen for all the building services. Two workplaces always form one work station which lighting is set up for.

- The aim was to create flexible lighting, regulated by daylight, that is adjusted to working time and that controls lighting on a sector basis. Two test installations proved our presence sensors to be very easy to assemble, simple to use and efficient, thereby outdoing the alternatives Luxmate or EIB/KNX .

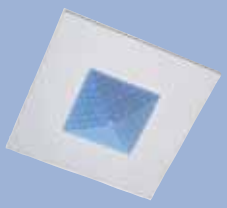
- The compact office DIM presence sensor is an integrated light control that combines presence detection with constant light control in one device. The square coverage area of the sensor makes planning easy. The areas covered by several sensors are perfectly aligned providing reliable coverage. All settings can be programmed by the press of a button with the QuickSet plus service remote control which saves a huge amount of time during the configuration process.

- The client expressed his satisfaction with the completed project which offers the highest levels of comfort with maximum energy savings and the users are clearly happy with.

Further references:
Schering AG, 14129 Berlin, GER
Kreissparkasse Peine, 31224 Peine, GER
AOK, 87509 Immenstadt, GER

Example of use in classrooms

Theben ECO-IR DUAL-C NT HTS presence sensors control two light strips in accordance with varying light levels.

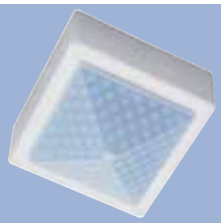


- In the newly renovated areas of the Schule für Haushalt und Lebensgestaltung (SHL) the client required lighting control with a daylight and presence dependent switch-off for nine classrooms, two preparation rooms, administration area and corridors.
- The relevant electrical planners tested various systems for their efficiency and ease ofinstallation and chose our presence detectors. The compact light control in the ECO-IR DUAL-C NT presence sensor with its two separately controlled switch outputs is ideally suited for use in the classroom. The lights nearest the window switch off before the lights near the wall in the inner part of the room where there is less natural light.
- The ECO-IR DUAL-C NT has inputs for conventional 230 V sensors or switches for manual lighting control. The client chose the semi-automatic operating mode where the lighting always has to be switched on manually. Both sets of lights can be switched on or off separately and with sufficient light, or absence of light, they switch off automatically. This differentiated switching system achieves average energy savings of well over 40 per cent compared with conventional light controls.
- Clients are not only impressed by the energy savings but also by the installation of the presence sensors in ceilings using the QuickFix installation set. All that can be seen of the ECO-IR DUAL-C NT is the pyramid lens and the square frame of QuickFix (see p. 34).

Further references:
Berufskolleg Ahaus, 48683 Ahaus, GER
Geschwister Scholl Gymnasium, 52068 Aachen
Rudolf Steiner School, 81929 Munich, GER

Example of use in a three court sports hall

Semi-automatic light control with ECO-IR 360C NT presence sensor

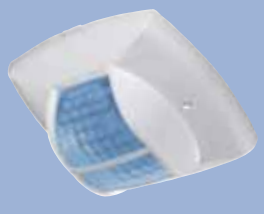


- The sports hall in Andelfingen consists of three individual halls each measuring 27 x 15 m. The whole area (45 x 27 m) can be used as one court or divided up for training purposes as required. The dividable hall offers an attractive environment for various sports such as handball, basketball, volleyball, tennis, badminton and unihockey. In addition, the client also specified an operational concept to include exhibitions as well as flexible use during the day, in the evenings and at weekends.
- This multi-purpose use requires individual control of the separate halls on the one hand and overall control when used as a single area on the other. Two ECO-IR 360C NT presence sensors are used in a master-slave parallelcircuit. Semi-automatic operation always requires manual switch-on. If the hall remains unused for longer than 10 minutes or if there is sufficient daylight then the lights switch off automatically. The hall lighting is controlled by the presence sensors in a customised way that thereby saves energy.
- The QuickSet plus service remote control was very well received by electricians. All settings can be adjusted at the press of a button and sent to the sensor which is of particular benefit and saves time with 8 m high ceilings.
- The flexible light control provided by Theben HTS presence sensors fully meets user requirements and, at the same time, saves a huge amount of energy.

Further references:
2-Feld Sporthalle, 21423 Roydorf, GER
3-fach Sporthalle, 41469 Neuss, GER
Sporthalle, 72336 Balingen, GER

Example of use in corridors

Lighting improvements with Theben HTS presence sensor in hospitals



- With a total of 250 beds, the Claraspital in Basel is the biggest private hospital on the right bank of the Rhine. An elderly persons care home and nutrition advice centre is also attached to it. The improvement measures can be traced back to an energy audit.

- In addition to the comfort and safety aspects, the search for energy savingopportunities was primarily the reason for the liighting improvement programme. The aim of the improvement measures has, over a number of years, been the stabilisation of energy consumption in spite of increasing technological developments. This control concept is aimed at increasing energy efficiency and economy. Presence sensors were widely used in corridors and public areas.

- The compact passage presence sensor is particularly suited to use in corridors. With its unique lens it reliably covers a distance of to 30 m. Even the function of its switch input is adjusted for use in corridors. In the corridor operating mode the sensor takes over the function of a stairs light switch. The presence sensor automatically controls the light, and the user can use the switch or sensor as required. On the other hand it cannot be switched off manually.

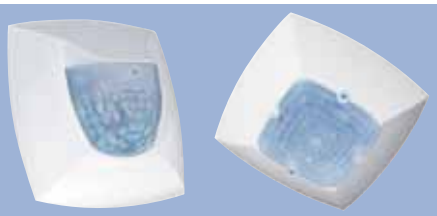
- Our presence sensors also reliably monitor extensive rooms thanks to the master- slave parallel circuit. Direct wiring makes installation straightforward and reasonably priced as additional relays are unnecessary.

- The detailed planning documentation convinced the client who undertook the project completely on their own. Further improvement measures have been completed using the same lighting concepts based on previous experience.

Further references:
Seniorenpflegeheim Volkrandstr., 10319 Berlin
Uniklinik, 60592 Frankfurt, GER
Reha-Klinik, 77787 Nordrach, GER

Example of use in storerooms, cloakrooms, showers

Cost-effective energy saving with the PresenceLight 180/360 presence sensors



- The Swiss machine tool company Bobst specialises in high output installations for the production of packing boxes made of flat and corrugated cardboard. The stage by stage improvement of extensive production plants in Lausanne led the developer to place great value on a flexible, cost-effective and energy saving operating plan for his lighting installations.

- While the ECO-IR series presence sensors were used to automate the warehouse section due to the height of the building, the cost-effective presence sensors PresenceLight 360 (ceiling mounted) and PresenceLight 180 (wall mounted) were used in the adjoining areas.

- The two presence sensors from the PresenceLight series operate the lights fully automatically depending on people and daylight. In small rooms a sensor operates the lighting individually. In larger rooms the switch outputs can be connected to each other. In renovation projects stair light switches sited in corridors can be reused. The presence sensor outputs can be set to short duration pulse.

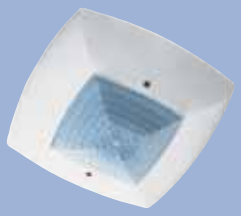
- Thanks to the IP 54 protection class, the PresenceLight 360 and PresenceLight 180 presence sensors can be used in showers and wet areas. The IP 54 protection class is valid both in flush mounting and surface mounting installations.

- The QuickSet plus service remote control has been very well received by caretakers. It is outstanding in simplifying building management because every room type can be stored in it.

Further references:
Kellerräume Grundschule, 37079 Göttingen, GER
Realschule, 48607 Ochtrup, GER
Fitnesscenter, 81379 Munich, GER

Example of use in individual and open-plan offices

Lighting improvements using EIB/KNX and DALI



- The long-established Lucerne based company BUCHERER AG counts as a market leader in watches and jewellery. The company headquarters, built at the beginning of the 1970's, has over 300 rooms of which 120 have recently been refurbished.

- The existing conventional installation has been gradually replaced by the EIB/KNX bus system. Based on positive experience with the ECO-IR 360EIB-AC in the corridors, the developer chose our EIB/KNX presence sensor for the offices.

- The compact office EIB was chosen as constant lighting control was required for the offices. It combines presence detection and lighting control in one device. In small offices the lighting is always controlled via switches; lighting control and switching off happen automatically. In open-plan offices there is fully automatic control of the lighting. The presence sensor thereby easily fulfils another requirement from the developer. Up to 64 electric ballasts are connected to the EIB/DALI Gateway which provides the connection to the ballast.

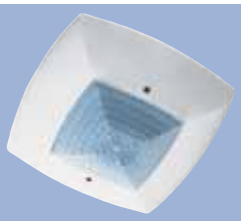
- Every compact office EIB controls up to two sets of lights per sensor according to differing light levels. Areas next to windows need less artificial light than areas in the interior of the room with little daylight.

- Using the QuickSet service remote control the light levels were set in a flash. All parties benefit equally from efficient technologies: rapid integration, more comfort and large energy savings.

Further references:
Altana, 22117 Hamburg, GER
Vattenfall Europe (HEW), 22297 Hamburg, GER
BASF, 67071 Ludwigshafen, GER

Example of use in classrooms

Efficient constant lighting control with the compact office DIM presence sensor



- Lancy Council near Geneva was looking for a cost-effective solution to updating the lighting in its eight schools with a total of 160 classrooms. The seventies installation no longer met current requirements. A 1200 W supply for a 70 m^2 classroom produced a lighting level below 200 lux.

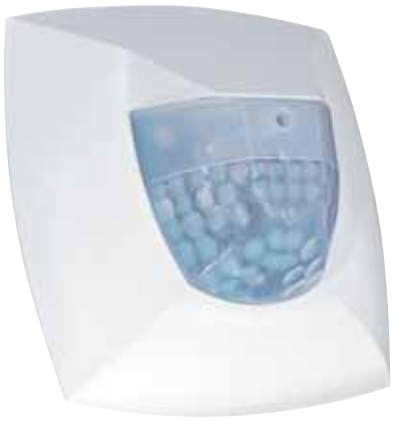
- A review provided the solution in the form of presence sensors with constant lighting control. The compact office DIM is a compact lighting control system. Compared with other systems from renowned producers as well as bus systems, it is convincing in every respect, both in terms of purchasing and installation costs. The lighting is split into two sets of lights; each controlled by a compact office DIM presence sensor. They are linked in a master-master parallel circuit and combine to detect presence. Every sensor has a switch which allows the individual sets of lights to be switched on or off and dimmed.

- Two additional compact office presence sensors were installed to extend the area of coverage. One of them switches the table lights in semi-automatic mode. The result: an efficient light control system, good value and easy to install.

- The doubled light level only consumed a minute amount of energy. Goal achieved: in addition to upgrading the rooms it resulted in an enormous annual reduction in energy consumption.

Further references:
St. Peter Schule, 41470 Neuss, GER
Europa-Gymnasium, 76744 Wörth am Rhein, GER
Karl Maybach Gym., 88045 Friedrichshafen, GER

Presence detector PresenceLight 180, PresenceLight 360



Presence detector PresenceLight180

Presence detector PresenceLight 360

Product Features PresenceLight 180

- Passive infrared presence detector for wall mounting
- Detection range 180°

Product Features PresenceLight 360

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°

Common product features

- Automatic lighting control
- Mixed light measurement
- Degree of protection IP 54 for installation in damp zones
- Switched output for light (relay, 230 V)
  Lighting control with brightness threshold value and self-learning switch off delay time
- Pulse function for staircase lighting timer
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data PresenceLight 180:
Detection range PresenceLight 180: horizontal 180°
Recommended mounting height:
approx. 1.6 m – 2.2 m
Maximum range: < 10 m

Technical data PresenceLight 360:
Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m - 3.0 m
Maximum range: max. 6 x 6 m (Mh 2.5 m)
max. 8 x 8 m (Mh 3.5 m)

Common specifications:
Rated voltage: 230 V ±10%, 50 Hz
Mixed light measurement: approx. 10–1500 Lux, deactivatable
Switch off delay time: 10 sec. - 20 min., Short pulse

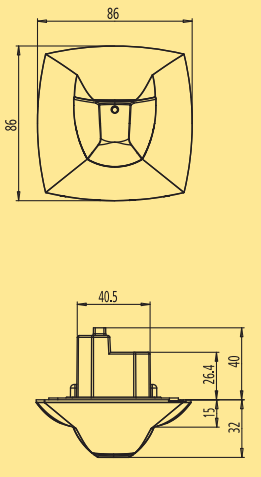
Relay output A for light: Relay 230 V
Max. switching capacity: ohmic 1400 VA
Incandescent lamps, halogen 1200 W
Max. number of electronic ballasts: 10 x (1 x 58 W); 5 x (2 x 58 W)
16 x (1 x 36 W); 8 x (2 x 36 W); 16 x (less than 36 W)

Mounting plate: 70 x 70 mm
Screw terminals: max. 2 x 2.5 mm²
Size of concealed housing: Size 1, (NIS,PMI)
Ambient temperature: -20°...+ 50°C
Degree of protection: IP 54

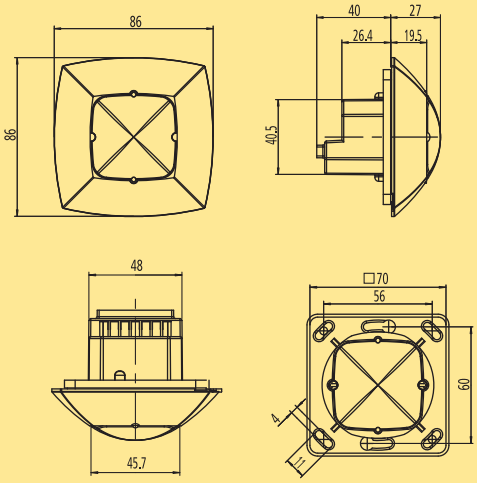
Detection range PresenceLight 360

M'height	seated persons	walking persons
2.0 m	3.0 m x 3.0 m	4.5m x 4.5m ± 0.5m
2.5 m	4.0 m x 4.0 m	6.0m x 6.0m ± 0.5m
3.0 m	4.5 m x 4.5 m	7.0m x 7.0m ± 1m
3.5 m	–	8.0m x 8.0m ± 1m

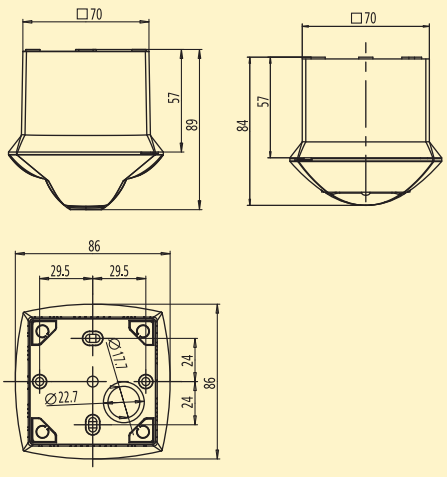
Dimension drawings: PresenceLight 180



Dimension drawings: PresenceLight 360



Dimension drawings: PresenceLight 180/360 mounted onto PresenceLight surface frame (Accessories)



Presence detector PresenceLight 180, PresenceLight 360

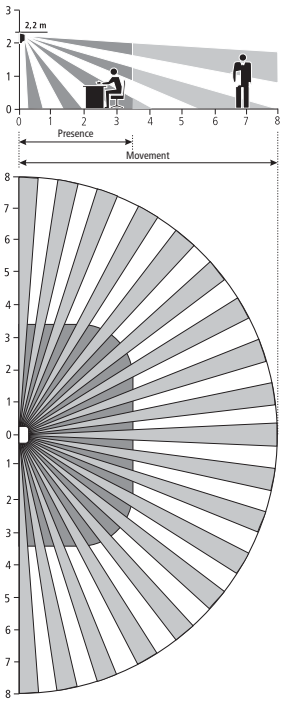
Function

- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Pulse function: in order to control existing staircase lighting timers, the switch off delay time can be set to "Pulse".
- The presence detector is equipped with a mixed light measurement and is designed for use with fluorescent lights (FL/PL) as well as halogen/incandescent lights.
- The square detection range of PresenceLight 360 ensures a safe and simple planning.
- PresenceLight 180: walking persons are detected reliably in a range with radius of 8m. Seated persons are reliably detected within a range of 7 m x 3.5 m. The recommended mounting height is 2.2 m.
- The test mode serves to check the presence detection and the wiring.

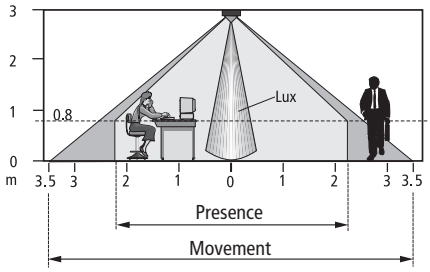
Accessories

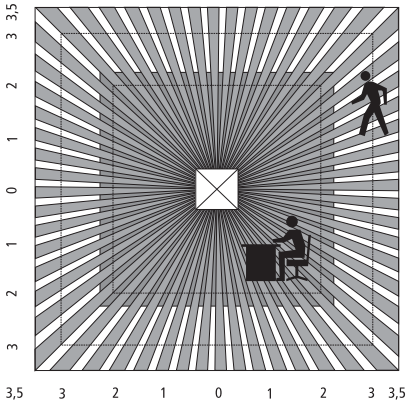
- Adjustment of the parameters is done with potentiometers or with the service remote control QuickSet plus (optionally, Order No. 907 0 532).
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No. 907 0 513).

Type: PresenceLight 180
Detection range

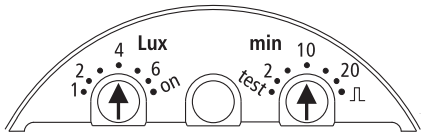


Type: PresenceLight 360
Detection range

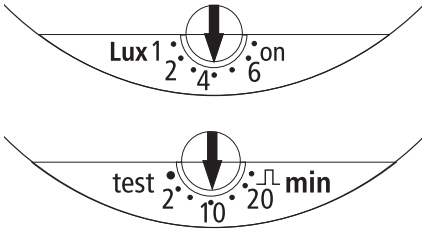




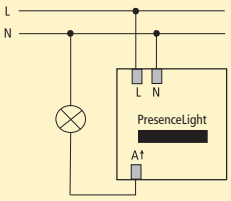
Potentiometer PresenceLight 180



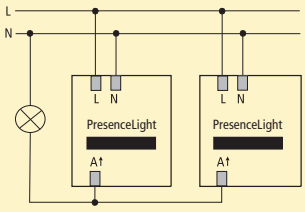
Potentiometer PresenceLight 360



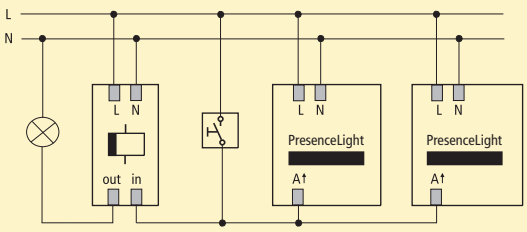
Connetion diagrams PresenceLight 180, PresenceLight 360



Single unit operation



Parallel circuit operation



Stairway-light time switch

Type	Detection range	Maximum range	Switch off delay time	Outputs (230 V~)	Order No.
PresenceLight 180	180°	< 10 m	10 sec–20 min	1400 VA (light)	200 0 050
PresenceLight 360	360°	8 x 8 m at 3.5 m height	10 sec–20 min	1400 VA (light)	200 0 000
Accessories: Surface frame PresenceLight, white					907 0 513

Presence detector compact passage

Presence detector compact passage

Presence detector compact passage 360°

- Passive infrared presence detector for ceiling mounting
- Rectangular detection range for corridors, 360°
- Automatic HVAC and lighting control as well as room surveillance
- Mixed light measurement
- Switched output for light (relay, 230V)
- Lighting control with brightness threshold value and self-learning switch off delay time
- Fully or semi-automatic operation switch-selectable
- Push button or switch connection for manual control
- Pulse function for staircase lighting timer
- Switched output for presence (potential-free relay)
- HVAC control with switch on delay and switch off delay time
- Reduced response characteristic for room surveillance
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data:
Rated voltage: 230 V ± 10 %, 50 Hz

Detection range: horizontal 360°, vertical 160°
Recommended mounting height: 2.0 m-3.0 m
Maximum range: max. 30 x 4 m (Mh 2.5 m)
max. 30 x 5 m (Mh 3.5 m)

Mixed light measurement: approx. 10-1500 Lux, deactivatable
Switch off delay time: 10 sec-20 min, Short pulse

Switch off delay time for presence: 10 sec–120 min
Switch on delay for presence: 0 sec-10 min,
Room surveillance

Relay output A for light: Relay 230 V
Max. switching capacity: ohmic 1400 VA
Incandescent lamps, halogen 1200 W

Max. number of electronic ballasts: 10x (1x 58 W); 5x (2x 58 W); 16x (1x 36 W); 8x (2x 36 W); 16x (less than 36 W)

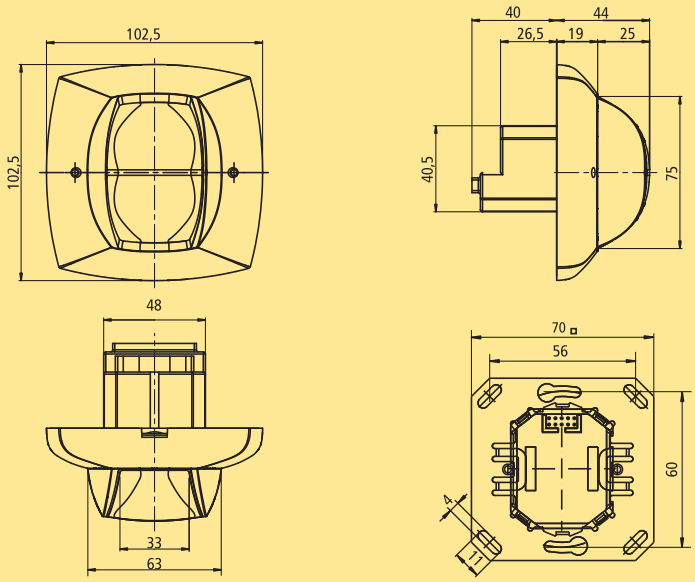
Relay output B for presence: Relay, free of potential
Switching power: 50 W (220 V DC), 50 VA (250 V AC), minimal 0.5 mV/10 mA

Mounting plate: 70 x 70 mm
Screw terminals: max. 2x 2.5 mm²
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°... +50°C
Degree of protection: IP 40

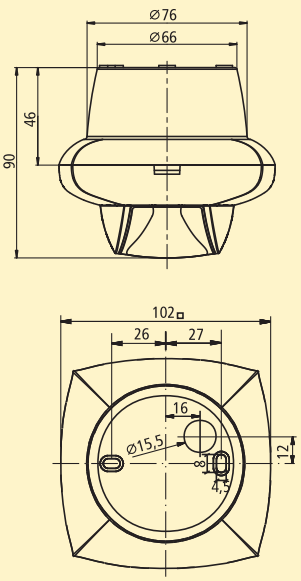
Detection range compact passage

M'height	radial motion	tangential motion
2.0 m	16 m x 3.5 m ± 1 m	30 m x 3.5 m ± 1 m
2.5 m	18 m x 4.0 m ± 1 m	30 m x 4.0 m ± 1 m
3.0 m	20 m x 4.5 m ± 1 m	30 m x 4.5 m ± 1 m
3.5 m	20 m (± 1 m) x 5.0 m	30 m (± 1 m) x 5.0 m

Dimension drawings: compact passage



Dimension drawings: compact passage mounted onto compact surface frame (Accessories)



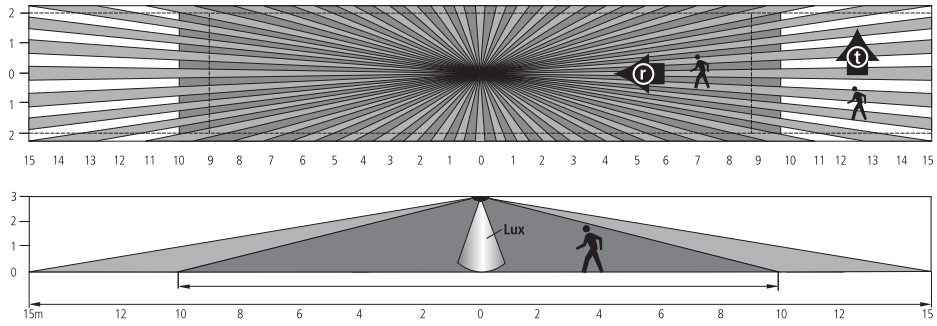
Function

- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Fully or semi-automatic operation: in the "fully automatic" operation mode, the lighting is switched on and off automatically depending on presence and brightness. In the "semi-automatic" operation mode, the light must always be switched on manually; switching off is done automatically.
- Manual control: The lighting can always be switched on and off manually with push button or switch.
- Push button function room/corridor: in the „corridor" position, the detector is used as staircase lighting timer, i.e. the light cannot be switched off manually.
- Pulse function: in order to control existing staircase lighting timers, the switch off delay time can be set to "Pulse".
- The presence detector is equipped with a mixed light measurement and is designed for use with fluorescent lights (FL/PL) as well as halogen/incandescent lights.
- The rectangular detection range ensures reliable detection in corridors and traffic areas of up to 30 m in length.
- Switched output for presence, used for HVAC control: the switching behaviour of the potential-free contact is only affected by presence.
- The switch on delay prevents that the system is switched on immediately. The contact does not close before the switch on delay time has elapsed.
- Room Surveillance: the sensitivity of the switched output for presence is reduced. The contact reliably indicates the presence of persons.
- Master-Slave parallel circuit operation: up to 10 detectors can be connected in parallel to enlarge the detection zone. The entire load is switched by the Master. Any further detectors, the Slaves, supply the presence information.
- Master-Master parallel circuit operation: up to 10 detectors can be connected in parallel to control multiple lighting groups. Each master switches his lighting group according to its own brightness measurement. The presence continues to be detected by all detectors together.
- The test mode serves to check the presence detection and the wiring.

Accessories

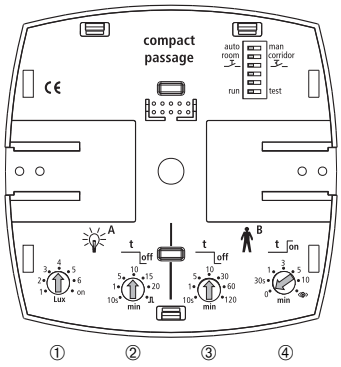
- Adjustment of the parameters is done with potentiometers or with the service remote control QuickSet plus (optionally, Order No.).
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No. 907 0 514).

Detection range (mounting height 3.0 m)



Top view and bottom view of the detection range

Sensor Module - rear side



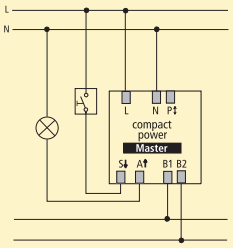
Settings on the compact office

DIP Switches:

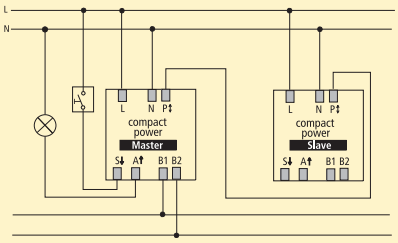
DIP1	lighting control: fully/semi-automatic
DIP2	Push button function: Room/Corridor
DIP3	Push button/switch control
DIP6	Operation mode: normal operation/test

① Brightness threshold (Lux)
② Switch off delay for light/activation of pulse function
③ Switch off delay for presence (HVAC/surveillance)
④ Switch on delay for HVAC/activation of room surveillance-function

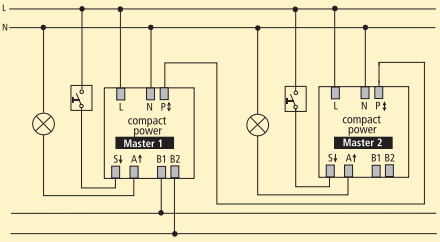
Wiring diagrams for power modules:



Single unit operation



Master-Slave parallel circuit operation



Master-Master parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
compact passage	360°	30 x 5 m at 3.5 m height	10 sec–20 min (light) 10 sec–120 min (HVAC)	1400 VA (light) 50 W (presence)	201 0 090
Accessories: Surface frame compact, white					907 0 514

Presence detector compact office

Presence detector compact office

Presence detector compact office

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°
- Automatic HVAC and lighting control as well as room surveillance
- Mixed light measurement
- Switched output for light (relay, 230V)
- Lighting control with brightness threshold value and self-learning switch off delay time
- Fully or semi-automatic operation switch-selectable
- Push button or switch connection for manual control
- Pulse function for staircase lighting timer
- Switched output for presence (potential-free relay)
- HVAC control with switch on delay and switch off delay time
- Reduced response characteristic for room surveillance
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data:
Rated voltage: 230 V ± 10 %, 50 Hz

Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.0 m
Maximum range: max. 6 x 6 m (Mh 2.5 m)
max. 8 x 8 m (Mh 3.5 m)

Mixed light measurement: approx. 10-1500 Lux, deactivatable
Switch off delay time: 10 sec-20 min, Short pulse

Switch off delay time for presence: 10 sec-120 min
Switch on delay for presence: 0 sec-10 min,
Room surveillance

Relay output A for light: Relay 230 V
Max. switching capacity: ohmic 1400 VA
Incandescent lamps, halogen 1200 W

Max. number of electronic ballasts: 10x (1x 58 W); 5x (2x 58 W); 16x (1x 36 W); 8x (2x 36 W); 16x (less than 36 W)

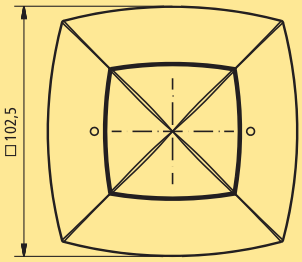
Relay output B for presence: Relay, free of potential
Switching power: 50 W (220 V DC), 50 VA (250 V AC)
minmal 0.5 mV/10 mA

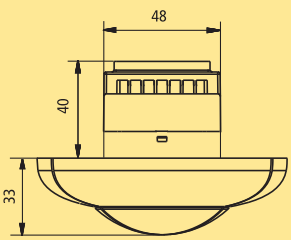
Mounting plate: 70 x 70 mm
Screw terminals: max. 2x 2.5 mm²
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...+50°C
Degree of protection: IP 40

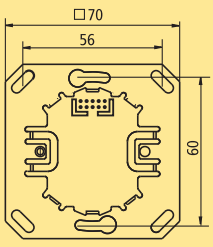
Detection range compact office

M'height	seated persons	walking persons
2.0 m	3.0 m x 3.0 m	4.5 m x 4.5 m ± 0.5 m
2.5 m	4.0 m x 4.0 m	6.0 m x 6.0 m ± 0.5 m
3.0 m	4.5 m x 4.5 m	7.0 m x 7.0 m ± 1 m
3.5 m	–	8.0 m x 8.0 m ± 1 m

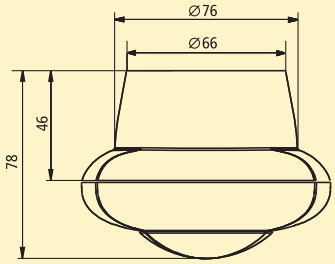
Dimension drawings: compact office

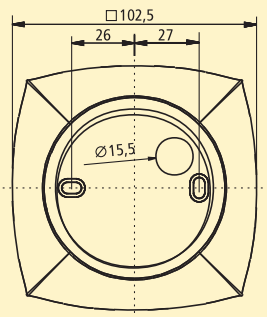






Dimension drawings: compact office mounted onto compact surface frame (Accessories)





Presence detector compact office

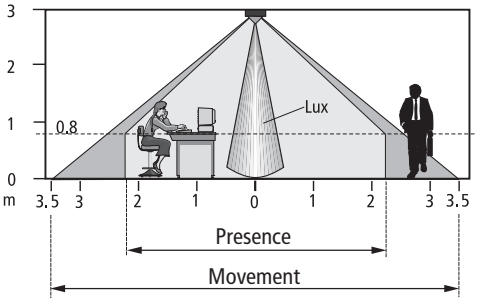
Function

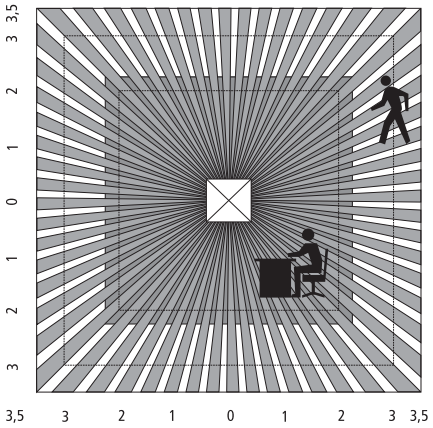
- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Fully or semi-automatic operation: in the "fully automatic" operation mode, the lighting is switched on and off automatically depending on the presence and brightness. In In the "semi-automatic" operation mode, the light must always be switched on manually; switching off is done automatically.
- Manual control: The lighting can always be switched on and off manually with push button or switch.
- Push button function room/corridor: in the „corridor" position, the detector is used as staircase lighting timer, i.e. the light cannot be switched off manually.
- Pulse function: in order to control existing staircase lighting timers, the switch off delay time can be set to "Pulse".
- The presence detector is equipped with a mixed light measurement and is designed for use with fluorescent lights (FL/PL) as well as halogen/incandescent lights.
- The square detection range ensures a safe and simple planning.
- Switched output for presence, used for HVAC control: the switching behaviour of the potential-free contact is only affected by presence.
- The switch on delay prevents that the system is switched on immediately. The contact does not close before the switch on delay time has elapsed.
- Room Surveillance: the sensitivity of the switched output for presence is reduced. The contact reliably indicates the presence of persons.
- Master-Slave parallel circuit operation: up to 10 detectors can be connected in parallel to enlarge the detection zone. The entire load is switched by the Master. Any further detectors, the Slaves, supply the presence information.
- Master-Master parallel circuit operation: up to 10 detectors can be connected in parallel to control multiple lighting groups. Each master switches his lighting group according to its own brightness measurement. The presence continues to be detected by all detectors together.
- The test mode serves to check the presence detection and the wiring.

Accessories

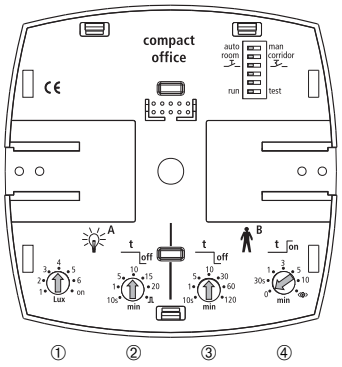
- Adjustment of the parameters is done with potentiometers or with the service remote control QuickSet plus (optionally, Order No. 907 0 532).
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No.. 907 0 514).

Detection range (mounting height 3.0 m)





Sensor Module - rear side



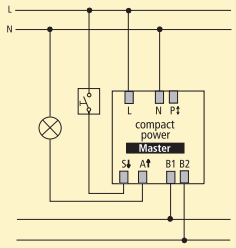
Settings on the compact office

DIP Switches:

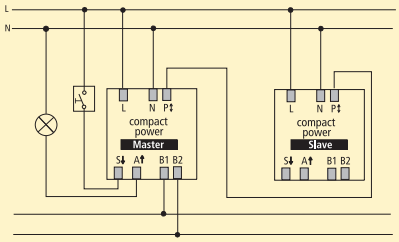
DIP1	lighting control: fully/semi-automatic
DIP2	Push button function: Room/Corridor
DIP3	Push button/switch control
DIP6	Operation mode: normal operation/test

① Brightness threshold (Lux)
② Switch off delay for light/activation of pulse function
③ Switch off delay for presence (HVAC/surveillance)
④ Switch on delay for HVAC/activation of room surveillance-function

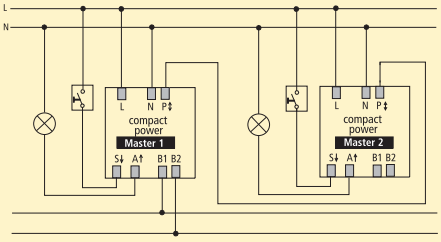
Wiring diagrams for power modules:



Single unit operation



Master-Slave parallel circuit operation



Master-Master parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
compact office	360°	8 x 8 m at 3.5 m height	10 sec–20 min (light) 10 sec–120 min (HVAC)	1400 VA (light) 50 W (presence)	201 0 000
Accessories: Surface frame compact, white					907 0 514

Presence detector ECO-IR 180A, ECO-IR 360A

Presence detector ECO-IR 180A

Presence detector ECO-IR 360A

Presence detector ECO-IR 180A

- Passive infrared presence detector for wall mounting
- Detection range 180°

Presence detector ECO-IR 360A

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°

Common product features

- Automatic HVAC and lighting control
- Real daylight measurement
- Switched output for light (relay, 230 V)
  Lighting control with brightness threshold value and self-learning switch off delay time
- Switched output for presence (potential-free relay)
- HVAC control with switch off delay time

Technical data ECO-IR 180A:
Detection range: horizontal 180°
Recommended mounting height: approx. 1.6 m-2.2 m
Maximum range: < 10 m

Technical data ECO-IR 360A:
Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.5 m
Maximum range: max. 8 x 8 m (Mh 2.5 m)
max. 10 x 10 m (Mh 3.5 m)

Common specifications:
Rated voltage: 230 V ± 10%, 50 Hz

Real daylight measurement: approx. 50-1600 Lux, deactivatable
Switch off delay time for light: 2 min-15 min
Switch off delay time for presence: 10 min-60 min

Relay output A for light: Relay 230 V
Max. switching capacity: 1400 VA
Max. number of electronic ballasts: 12x (1x 58 W); 6x (2x 58 W); 18x (1x 36 W); 9x (2x 36 W); 18x (less than 36 W)

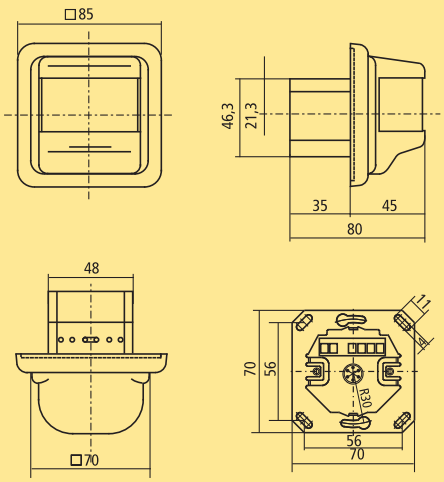
Relay output B for presence: Relay, free of potential
Switching power: 100 W (24 V DC), 460 VA (230 V AC), μ

Mounting plate: 70 x 70 mm
Terminals without screws: max. 1.5 mm²
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...+50°C
Protection class II: EN 60730-1

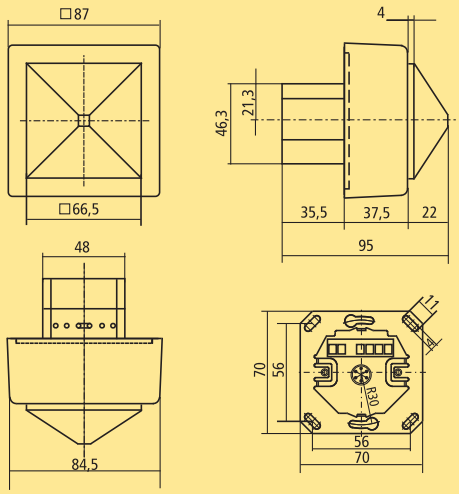
Detection range ECO-IR 360A

M'height	seated persons	walking persons
2,0 m	4,5 m x 4,5 m	6,0 m x 6,0 m ± 0.5 m
2,5 m	6,0 m x 6,0 m	8,0 m x 8,0 m ± 0.5 m
3,0 m	7,0 m x 7,0 m	9,0 m x 9,0 m ± 0.5 m
3,5 m	8,0 m x 8,0 m	10 m x 10 m ± 1 m
4,0 m	–	11 m x 11 m ± 1 m

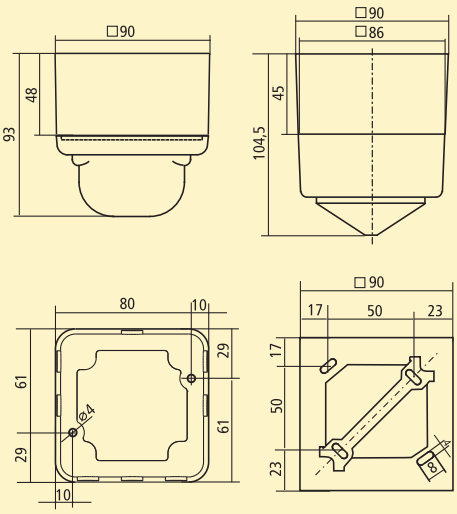
Dimension drawings: ECO-IR 180A



Dimension drawings: ECO-IR 360A



Dimension drawings: ECO-IR 180A/360A mounted onto ECO-IR 180/360 surface frame (Accessories)



Presence detector ECO-IR 180A, ECO-IR 360A

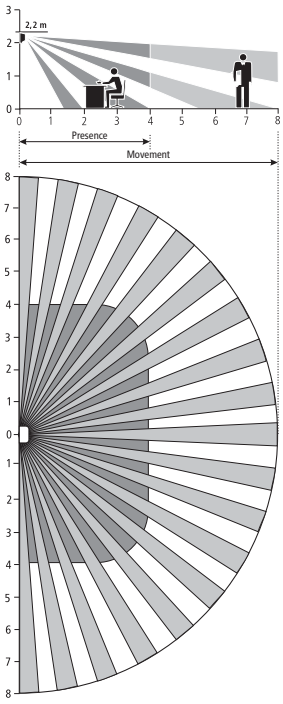
Function

- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- The presence detector is equipped with real daylight measurement and is designed for use with fluorescent lights (FL/PL) only.
- The square detection range of ECO-IR 360A ensures a safe and simple planning.
- ECO-IR 180A: walking persons are detected reliably in a range with radius of 8m. Seated persons are reliably detected within a range of 8 m x 4 m. The recommended mounting height is 2.2 m.
- Switched output for presence, used for HVAC control: the switching behaviour of the potential-free contact is only affected by presence.
- Adjustment of the parameters is done with potentiometers.

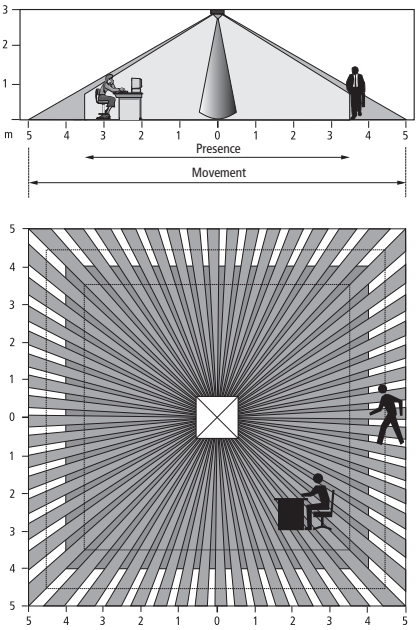
Accessories

- A suitable frame for surface mounting is available separately (Order No. 907 0 512 for ECO-IR 360 and Order No. 907 0 511 for ECO-IR 180) respectively.
- The unit can be flush-mounted into suspended ceilings using the QuickFix mounting kit (see page 34).

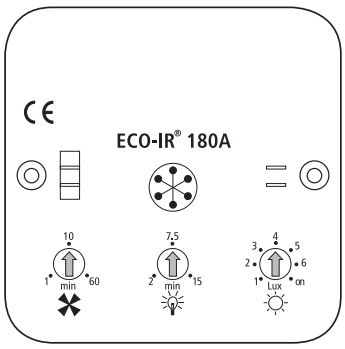
Type: ECO-IR 180A
Detection range



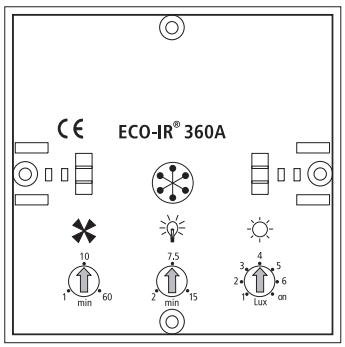
Type: ECO-IR 360A
Detection range



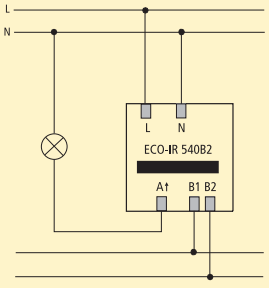
Sensor Module - rear side ECO-IR 180A



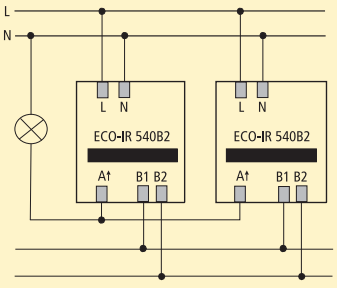
Sensor Module - rear side ECO-IR 360A



Wiring diagrams for power modules: ECO-IR 180A, ECO-IR 360A



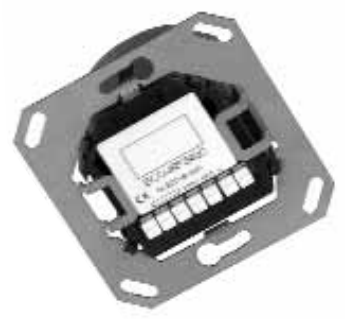
Single unit operation



Parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
ECO-IR 180A	180°	< 10 m	2 min–15 min (light)	1400 VA (light), 100 W (presence)	202 0 050
ECO-IR 360A	360°	10 x 10 m at 3.5 m height	10 min–60 min (presence)	1400 VA (light), 100 W (presence)	202 0 000
Accessories: Surface frame ECO-IR 180, white					907 0 511
Accessories: Surface frame ECO-IR 360, white					907 0 512

Presence detector ECO-IR 360C NT



Presence detector ECO-IR 360C NT

Presence detector ECO-IR 360C NT

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°
- Automatic HVAC and lighting control as well as room surveillance
- Real daylight measurement
- Switched output for light (relay, 230V)
- Lighting control with brightness threshold value and self-learning switch off delay time
- Fully or semi-automatic operation switch-selectable
- Push button or switch connection for manual control
- Pulse function for staircase lighting timer
- Inrush current limitation for electronic ballasts
- Switched output for presence (potential-free relay)
- HVAC control with switch on delay and switch off delay time
- Reduced response characteristic for room surveillance
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data:
Rated voltage: 230 V ± 10 %, 50 Hz

Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.5 m
Maximum range: max. 8 x 8 m (Mh 2.5 m)
max. 10 x 10 m (Mh 3.5 m)

Real daylight measurement: approx. 10 - 1500 Lux, deactivatable
Switch off delay time for light: 10 sec-20 min, Short pulse

Switch off delay time for presence: 10 sec-120 min
Switch on delay for presence: 0 sec-10 min, Room surveillance

Relay output A for light: Relay 230 V, Inrush current limitation
Max. switching capacity: 1400 VA
Max. number of electronic ballasts: 16x (1x 58 W); 8x (2x 58 W); 24x (1x 36 W); 12x (2x 36 W); 24x (less than 36 W)

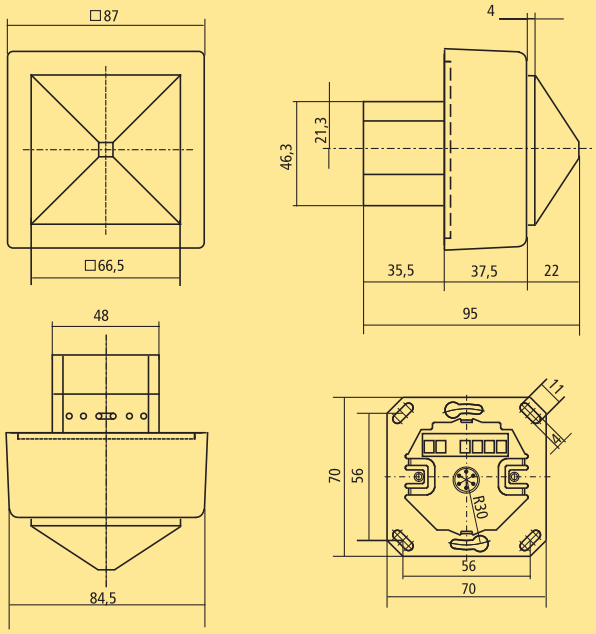
Relay output B for presence: Relay, free of potential
Rated voltage: 100 W (50 V DC), 460 VA (230 V AC), minimal 10 V/100 mA

Mounting plate: 70 x 70 mm
Terminals without screws: max. 1.5 mm²
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...+50°C
Degree of protection: IP 40

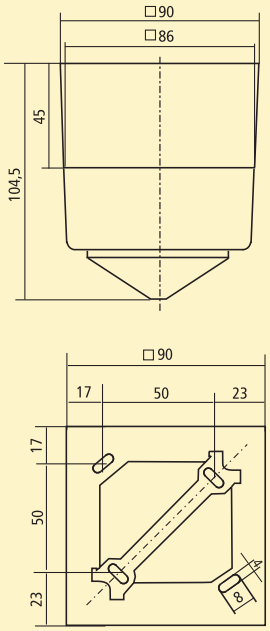
Detection range ECO-IR 360C NT

M'height	seated persons	walking persons
2.0 m	4.5 m x 4.5 m	6.0 m x 6.0 m ± 0.5 m
2.5 m	6.0 m x 6.0 m	8.0 m x 8.0 m ± 0.5 m
3.0 m	7.0 m x 7.0 m	9.0 m x 9.0 m ± 0.5 m
3.5 m	8.0 m x 8.0 m	10 m x 10 m ± 1 m
4.0 m	–	11 m x 11 m ± 1 m
9.0 m (sports hall)		19 m x 19 m

Dimension drawings: ECO-IR 360C NT



Dimension drawings: ECO-IR 360C NT mounted onto ECO-IR 360 surface frame (Accessories)



Presence detector ECO-IR 360C NT

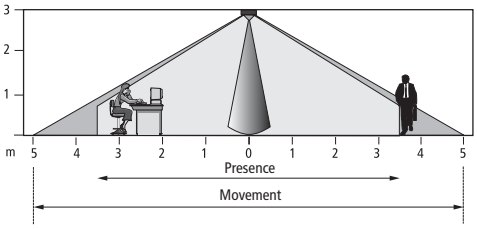
Function

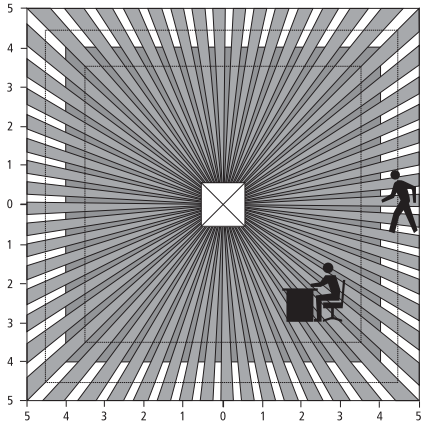
- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Fully or semi-automatic operation: in the "fully automatic" operation mode, the lighting is switched on and off automatically depending on presence and brightness. In the "semi-automatic" operation mode, the light must always be switched on manually; switching off is done automatically.
- Manual control: The lighting can always be switched on and off manually with push button or switch.
- Push button function room/corridor: in the „corridor" position, the detector is used as staircase lighting timer, i.e. the light cannot be switched off manually.
- Pulse function: in order to control existing staircase lighting timers, the switch off delay time can be set to "Pulse".
- The inrush current limitation ensures the presence detector is especially suitable for switching of electronic ballasts.
- The presence detector is equipped with real daylight measurement and is designed for use with fluorescent lights (FL/PL) only.
- The square detection range ensures a safe and simple planning.
- Switched output for presence, used for HVAC control: the switching behaviour of the potential-free contact is only affected by presence.
- The switch on delay prevents that the system is switched on immediately. The contact does not close before the switch on delay time has elapsed.
- Room Surveillance: the sensitivity of the switched output for presence is reduced. The contact reliably indicates the presence of persons.
- Master-Slave parallel circuit operation: up to 10 detectors can be connected in parallel to enlarge the detection zone. The entire load is switched by the Master. Any further detectors, the Slaves, supply the presence information.
- The test mode serves to check the presence detection and the wiring.

Accessories

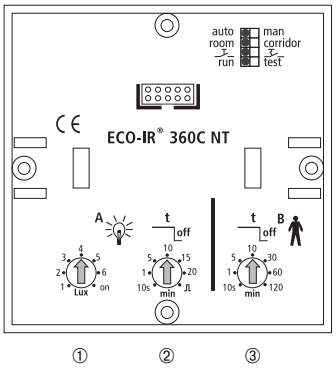
- Adjustment of the parameters is done with potentiometers or with the service remote control QuickSet plus (optionally, Order No. 907 0 532).
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No. 907 0 512).
- The unit can be flush-mounted into suspended ceilings using the QuickFix mounting kit (see page 34).

Detection range (mounting height 3.0 m)





Sensor Module - rear side



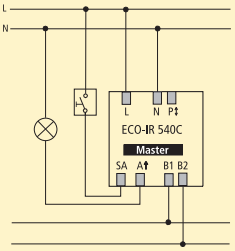
Settings on the ECO-IR 360C NT

DIP Switches:

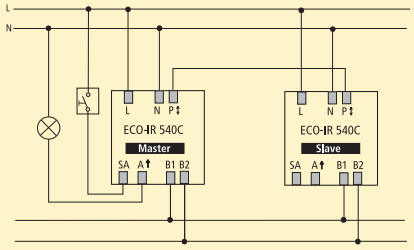
DIP1 lighting control: fully/semi-automatic
DIP2 Push button function: Room/Corridor
DIP3 Push button/switch control
DIP4 Operation mode: normal operation/test

① Brightness threshold (Lux)
② Switch off delay for light/activation of pulse function
③ Switch off delay for presence (HVAC/surveillance)

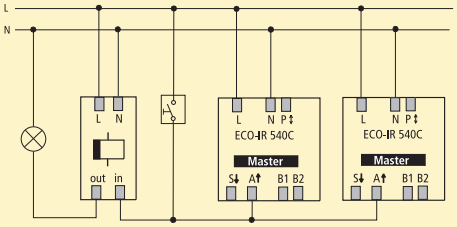
Wiring diagrams for power modules:



Single unit operation



Master-Slave parallel circuit operation



Stairway-light time switch parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
ECO-IR 360C NT	360°	10 x 10 m at 3.5 m height	10 sec–20 min (light) 10 sec–120 min (HVAC)	1400 VA (light) 100 W (presence)	202 0 400
Accessories: Surface frame ECO-IR 360, white					907 0 512
QuickSafe ball guard protective cage for ECO-IR/ compact office…, white, metal					907 0 531

Presence detector ECO-IR DUAL-C NT

Presence detector ECO-IR DUAL-C NT

Presence detector ECO-IR DUAL-C NT

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°
- Automatic control of two lighting groups
- Dual real daylight measurement
- Two switched outputs for light (relays, 230V)
- Lighting control with two brightness threshold values and self-learning switch off delay time
- Fully or semi-automatic operation switch-selectable
- Push button or switch connection for manual control
- Pulse function for staircase lighting timer
- Inrush current limitation for electronic ballasts
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data:
Rated voltage: 230 V ± 10 %, 50 Hz

Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.5 m
Maximum range: max. 8 x 8 m (Mh 2.5 m)
max. 10 x 10 m (Mh 3.5 m)

Real daylight measurement: approx. 10-1500 Lux, deactivatable
Switch off delay time: 10 sec-20 min, Short pulse

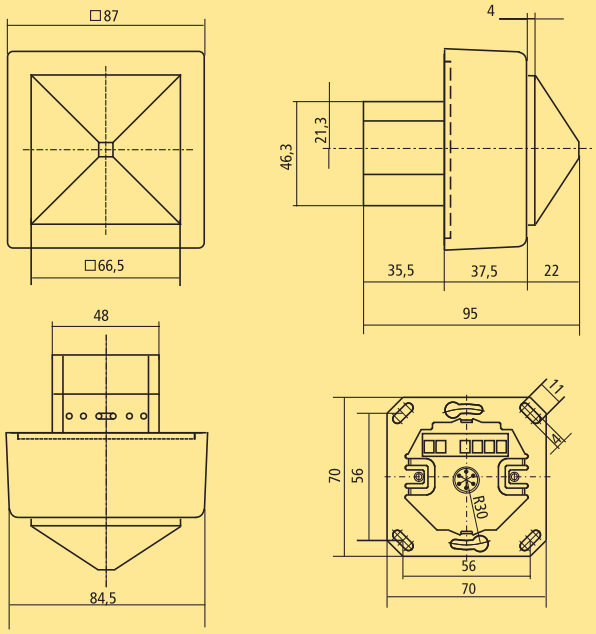
Relay outputs A,B for light: Relay 230 V, Inrush current limitation
Max. switching capacity, total of both contacts: 1400 VA
Max. number of electronic ballasts for each relay: 16x (1x 58 W); 8x (2x 58 W); 24x (1x 36 W); 12x (2x 36 W); 24x (less than 36 W)

Mounting plate: 70 x 70 mm
Terminals without screws: max. 1.5 mm²
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...+50°C
Degree of protection: IP 40

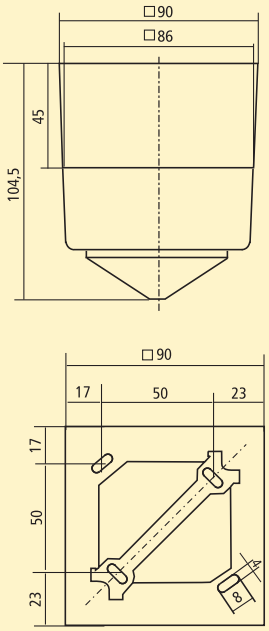
Detection range ECO-IR DUAL-C NT

M'height	seated persons	walking persons
2.0 m	4.5 m x 4.5 m	6.0 m x 6.0 m ± 0.5 m
2.5 m	6.0 m x 6.0 m	8.0 m x 8.0 m ± 0.5 m
3.0 m	7.0 m x 7.0 m	9.0 m x 9.0 m ± 0.5 m
3.5 m	8.0 m x 8.0m	10 m x 10 m ± 1 m
4.0 m	–	11 m x 11 m ± 1 m

Dimension drawings: ECO-IR DUAL-C NT



Dimension drawings: ECO-IR DUAL-C NT mounted onto ECO-IR 360 surface frame (Accessories)



Presence detector ECO-IR DUAL-C NT

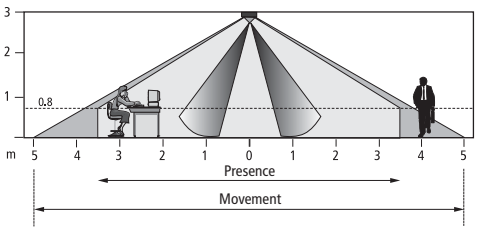
Function

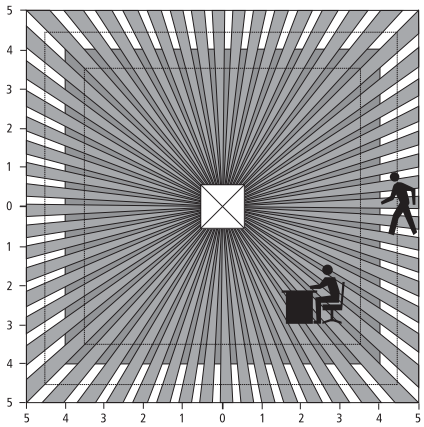
- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Fully or semi-automatic operation: in the "fully automatic" operation mode, the lighting is switched on and off automatically depending on presence and brightness. In the "semi-automatic" operation mode, the light must always be switched on manually; switching off is done automatically.
- Manual control: The lighting can always be switched on and off manually with push button or switch.
- The inrush current limitation ensures the presence detector is especially suitable for switching of electronic ballasts.
- The presence detector is equipped with dual real daylight measurement and is designed for use with fluorescent lights (FL/PL) only.
- The square detection range ensures a safe and simple planning.
- Parallel circuit operation: up to 10 detectors can be connected in parallel to enlarge the detection zone. They continue to control two lighting groups. The presence continues to be detected by all detectors together.
- The test mode serves to check the presence detection and the wiring.

Accessories

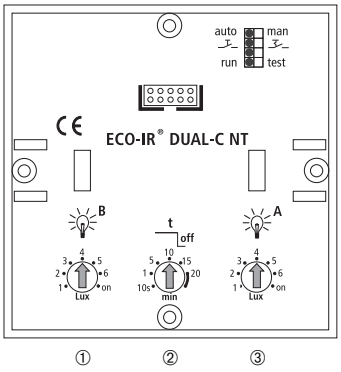
- Adjustment of the parameters is done with potentiometers or with the service remote control QuickSet plus (optionally, Order No. 907 0 532).
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No. 907 0 512).
- The unit can be flush-mounted into suspended ceilings using the QuickFix mounting kit (see page 34).

Detection range (mounting height 3.0 m)





Sensor Module - rear side

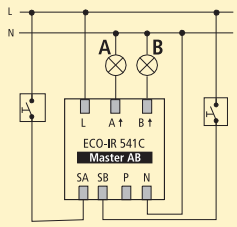


Settings on the ECO-IR DUAL-C NT

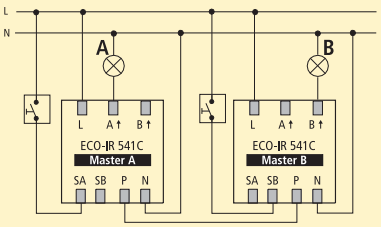
DIP Switches:
DIP1 lighting control: fully/semi-automatic
DIP2 Push button/switch control
DIP4 Operation mode: normal operation/test

① Brightness threshold B (Lux)
② Switch off delay for light, A, B
③ Brightness threshold A (Lux)

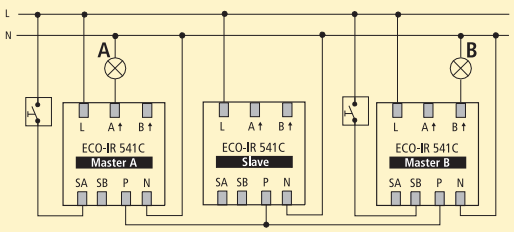
Wiring diagrams for power modules:



Single unit operation



MasterA-MasterB parallel circuit operation



MasterA-Slave-MasterB parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
ECO-IR DUAL-C NT	360°	10 x 10 m at 3.5 m height	10 sec–20 min (light)	1400 VA (light) 2 channels	202 0 401
Accessories: Surface frame ECO-IR 360, white					907 0 512

Presence detector compact office DIM

Presence detector office DIM

Presence detector compact office DIM

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°
- Automatic lighting regulation with constant light control
- Mixed light measurement
- Switched output for light (relay, 230 V) and 1-10 V Interface
- Fully or semi-automatic operation switch-selectable
- Push button connection for manual control
- Brightness switching level, self-learning switch-off delay time and stand-by time can be adjusted
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data:
Rated voltage: 230 V ± 10 %, 50 Hz

Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.0 m
Maximum range: max. 6 x 6 m (Mh 2.5 m)
max. 8 x 8 m (Mh 3.5 m)

Mixed light measurement: approx. 50-1500 Lux
Switch off delay time: 10 sec-20 min
Stand-by time for light: 0 sec-60 min / on

Relay output A for light: Relay 230 V
Max. switching capacity: ohmic 1400 VA
Incandescent lamps, halogen 1200 W
Max. number of electronic ballasts: 10x (1x 58 W); 5x (2x 58 W); 16x (1x 36 W); 8x (2x 36 W); 16x (less than 36 W)

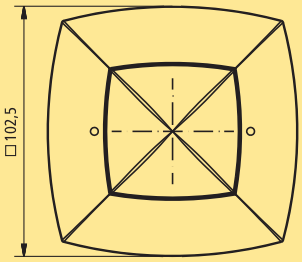
1-10 V Interface: EN 60929/A1
Control output: 1-10 V DC / 100 mA,
Max. number of electronic ballasts: 50 EVG

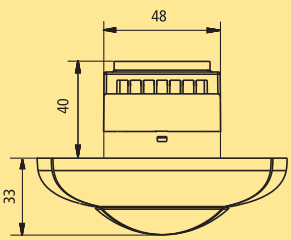
Mounting plate: 70 x 70 mm
Screw terminals: max. 2x 2.5 mm²
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...+50°C
Degree of protection: IP 40

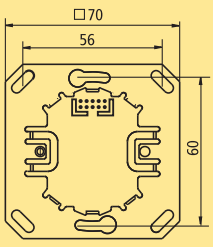
Detection range compact office DIM

M'height	seated persons	walking persons
2.0 m	3.0 m x 3.0 m	4.5 m x 4.5 m ± 0.5 m
2.5 m	4.0 m x 4.0 m	6.0 m x 6.0 m ± 0.5 m
3.0 m	4.5 m x 4.5 m	7.0 m x 7.0 m ± 1 m
3.5 m	-	8.0 m x 8.0 m ± 1 m

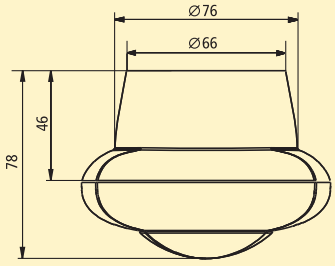
Dimension drawings: compact office DIM

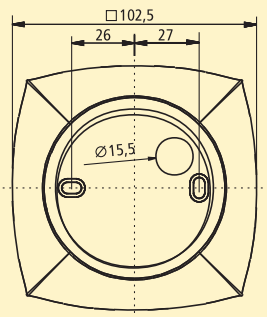






Dimension drawings: compact office DIM mounted onto compact surface frame (Accessories)





Presence detector compact office DIM

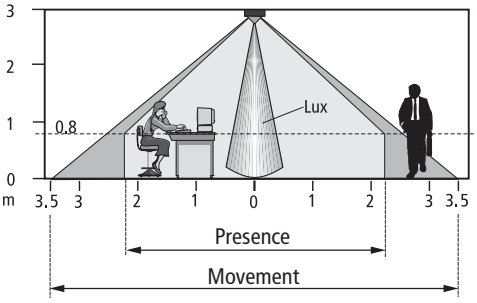
Function

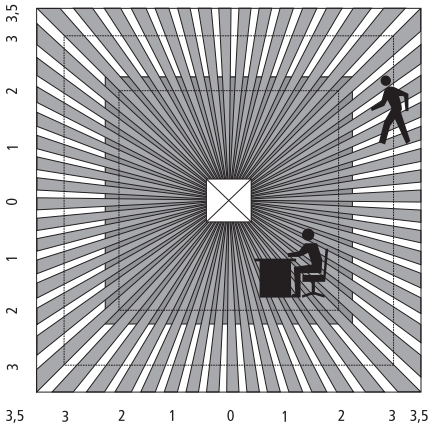
- The switching behaviour is controlled by presence and brightness. The contact closes in case of darkness and presence. The 1-10V interface controls the artificial light to a constant brightness level. The contact opens in case of sufficient daylight or absence.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Fully or semi-automatic operation: in the "fully automatic" operation mode, the lighting is switched on and off automatically depending on presence and brightness. In the "semi-automatic" operation mode, the light must always be switched on manually; switching off is done automatically.
- Manual control: The lighting can always be switched or dimmed manually with push buttons.
- The Stand-by time ensures a minimal brightness and provides a safety feeling in hospital and care applications by remaining in the stand-by mode for the preset time.
- The presence detector is equipped with a mixed light measurement and is designed for use with fluorescent lights (FL/PL) as well as halogen/incandescent lights.
- The square detection range ensures a safe and simple planning.
- Master-Slave parallel circuit operation: up to 10 detectors can be connected in parallel to enlarge the detection zone. The entire load is switched by the Master. Any further detectors, the Slaves, supply the presence information.
- Master-Master parallel circuit operation: up to 10 detectors can be connected in parallel to control multiple lighting groups. Each master switches his lighting group according to its own brightness measurement. The presence continues to be detected by all detectors together.
- The test mode serves to check the presence detection and the wiring.

Accessories

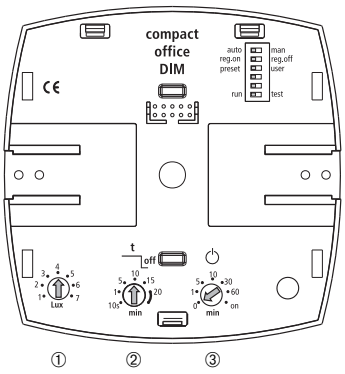
- Adjustment of the parameters is done with potentiometers or with the service remote control QuickSet plus (optionally, Order No. 907 0 532).
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching and dimming of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No. 907 0 514).

Detection range (mounting height 3.0 m)





Sensor Module - rear side



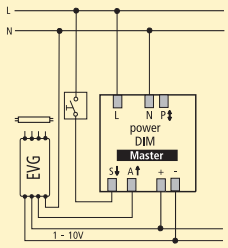
Settings on the compact office DIM

DIP Switches:

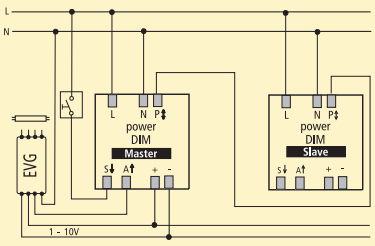
DIP1 Lighting control: fully/semi-automatic
DIP2: Constant light control on/off
DIP3: Desired value adjustement preset/user
DIP6 Operation mode: normal operation/test

① Brightness threshold(Lux)
② Switch off delay for light
③ Stand-by time

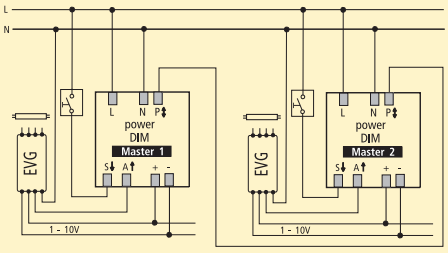
Wiring diagrams for power modules:



Single unit operation



Master-Slave parallel circuit operation



Master-Master parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
compact office DIM	360°	8 x 8 m at 3.5 m height	10 sec–20 min (light)	1400 VA (light) 1–10 V	201 0 001
Accessories: Surface frame compact, white					907 0 514

Presence detector compact office EIB

Presence detector compact office EIB

Presence detector compact office EIB

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°
- Mixed light measurement
- Two outputs for light fort he control of two lighting groups
- Switching or constant light control
- Fully or semi-automatic operation switch-selectable
- Output presence for HVAC control with switch on delay and switch off delay time
- Reduced response characteristic for room surveillance
- Integrated bus coupling unit
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data:
Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.0m
Maximum range: max. 6 x 6 m (Mh 2.5 m)
max. 8 x 8 m (Mh 3.5 m)

Mixed light measurement: approx. 10-1500 Lux, deactivatable
Switch off delay time: 30 sec-20 min
Stand-by time for light: 0 sec-60 min / on

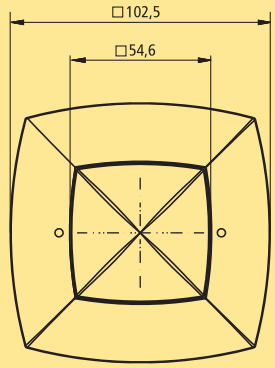
Switch off delay time for presence: 30 sec-120 min
Switch on delay for presence: 0 sec-30 min

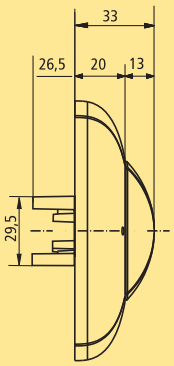
Mounting plate: 70 x 70 mm
Connection terminal: EIB
Size of concealed housing: Size 1 (NIS,PMI)
Ambient temperature: 0°...50°C
Degree of protection: IP 40

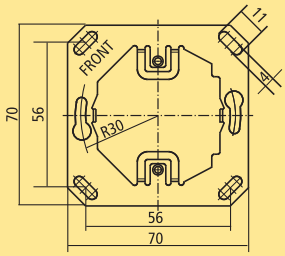
Detection range compact office EIB

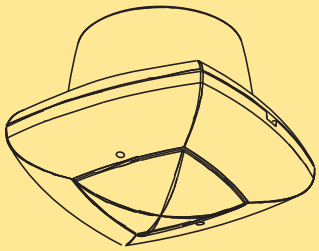
M'height	seated persons	walking persons
2.0 m	3.0 m x 3.0 m	4.5 m x 4.5 m ± 0.5 m
2.5 m	4.0 m x 4.0 m	6.0 m x 6.0 m ± 0.5 m
3.0 m	4.5 m x 4.5 m	7.0 m x 7.0 m ± 1 m
3.5 m	–	8.0 m x 8.0 m ± 1 m

Dimension drawings: compact office EIB

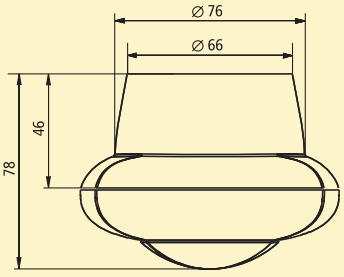


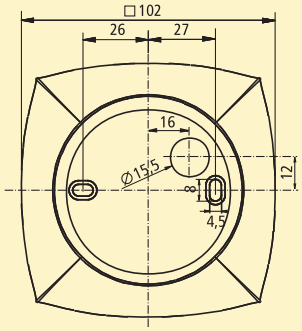






Dimension drawings: compact office EIB mounted onto compact surface frame (Accessories)





Presence detector compact office EIB

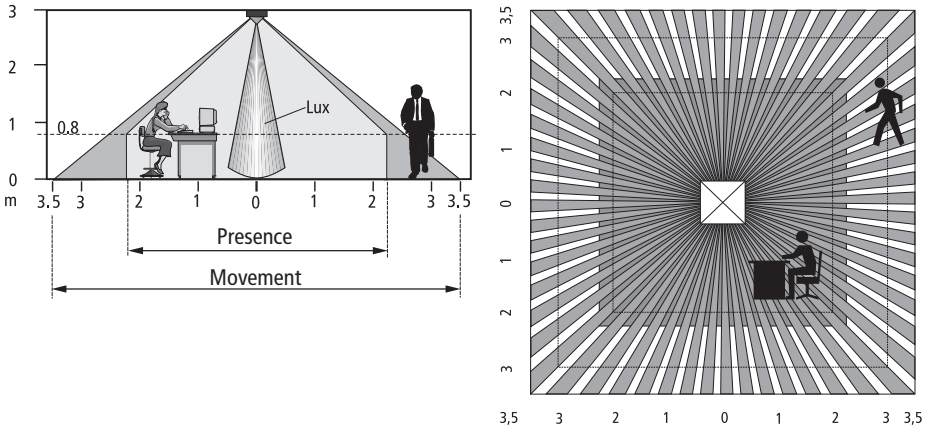
Function

- The switching behaviour is controlled by presence and brightness, alternatively switching or constant light control.
- In the switching mode, the lighting switches on in case of darkness and presence, and switches off in case of brightness and absence, respectively.In the constant light control mode, the artificial light is controlled to a constant brightness level.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Fully or semi-automatic operation: in the "fully automatic" operation mode, the lighting is switched on and off automatically depending on presence and brightness. In the "semi-automatic" operation mode, the light must always be switched on manually; switching off is done automatically.
- Manual control: The lighting can always be switched or dimmed manually.
- The presence detector is equipped with a mixed light measurement and is designed for use with fluorescent lights (FL/PL) as well as halogen/incandescent lights.
- The square detection range ensures a safe and simple planning.
- Output presence for HVAC control: the switching behaviour is only affected by presence.
- The switch on delay prevents that the system is switched on immediately. The contact does not close before the switch on delay time has elapsed.
- Room Surveillance: the sensitivity of the output surveillance is reduced and thus reliably indicates the presence of persons.
- The output for brightness provides the brightness information to visualisation tools.
- Master-Slave parallel circuit operation: a number of detectors can be connected in parallel to enlarge the detection zone. Lighting and HVAC is controlled by the Master. Any further detectors, the Slaves, supply the presence information.
- Master-Master parallel circuit operation: a number of detectors can be connected in parallel to control multiple lighting groups. Each master controls his lighting group according to its own brightness measurement. The presence continues to be detected by all detectors together.
- The test mode serves to check the presence detection and parameterization.

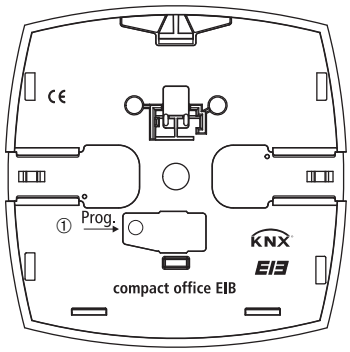
Accessories

- The service remote control QuickSet plus (Order No. 907 0 532) is optionally available as assistance for setting the brightness value.
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching and dimming of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No. 907 0 514).

Detection range (mounting height 3.0 m)



Sensor Module - rear side



Settings on the compact office EIB

① Programming key

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
compact office EIB	360°	8 x 8 m at 3.5 m height	30 sec–120 min (light)	2 x light, HVAC, surveillance, brightness switching or constant light control	201 9 200
Accessories: Surface frame compact, white					907 0 514

Presence detector ECO-IR 180EIB-AC
ECO-IR 360EIB-AC

Presence detector ECO-IR 180EIB-AC

Presence detector ECO-IR 360EIB-AC

Presence detector ECO-IR 180EIB-AC
- Passive infrared presence detector for wall mounting
- Detection range 180°

Presence detector ECO-IR 360EIB-AC
- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°

Common product features
- Automatic HVAC and lighting control
- Real daylight measurement
- Output for light
- Lighting control with brightness threshold value and self-learning switch off delay time
- Fully or semi-automatic operation switch-selectable
- Output presence for HVAC control with switch off delay time

Technical data ECO-IR 180EIB-AC:
Detection range: horizontal 180°
Recommended mounting height:
approx. 1.6 m-2.2 m
Maximum range: < 10 m

Technical data ECO-IR 360EIB-AC:
Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.5 m
Maximum range: max. 8 x 8 m (Mh 2.5 m)
max. 10 x 10 m (Mh 3.5 m)

Common specifications:
Real daylight measurement: approx. 100-1600 Lux, deactivatable, approx. 25 – 200Lux (extended)

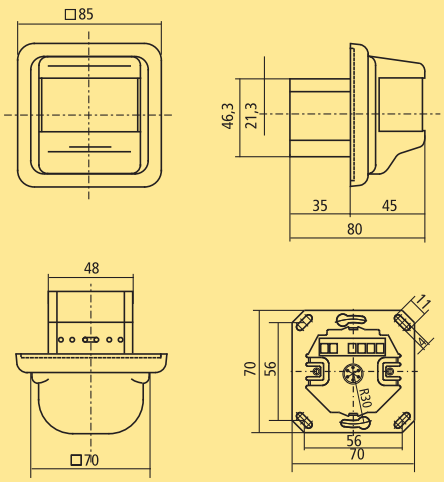
Switch off delay time: 30 sec-20 min
Switch off delay time for presence: 30 sec-60 min

Mounting plate: 70 x 70 mm
Connection terminal: EIB
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...45°C
Degree of protection: IP 40

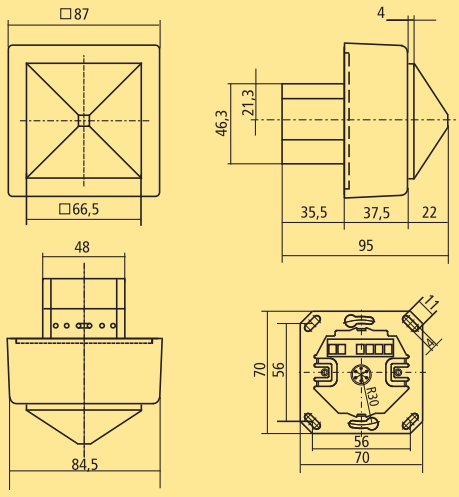
Detection range ECO-IR 360EIB-AC

M'height	seated persons	walking persons
2.0 m	4.5 m x 4.5 m	6.0 m x 6.0 m ± 0.5 m
2.5 m	6.0 m x 6.0 m	8.0 m x 8.0 m ± 0.5 m
3.0 m	7.0 m x 7.0 m	9.0 m x 9.0 m ± 0.5 m
3.5 m	8.0 m x 8.0 m	10 m x 10 m ± 1 m
4.0 m	–	11 m x 11 m ± 1 m

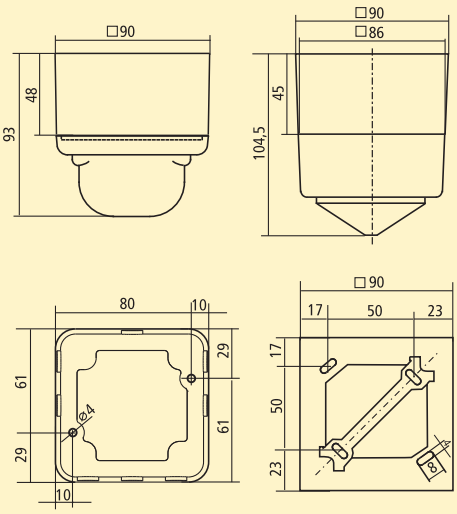
Dimension drawings: ECO-IR 180EIB-AC



Dimension drawings: ECO-IR 360EIB-AC



Dimension drawings: ECO-IR 180EIB-AC/ 360EIB-AC mounted onto ECO-IR 180/360 surface frame (Accessories)



Presence detector ECO-IR 180EIB-AC
ECO-IR 360EIB-AC

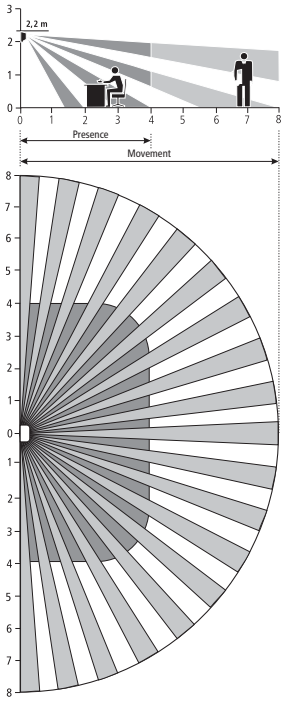
Function

- The switching behaviour is controlled by presence and brightness.
- The lighting switches on in case of darkness and presence, and switches off in case of brightness and absence.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Fully or semi-automatic operation: in the "fully automatic" operation mode, the lighting is switched on and off automatically depending on presence and brightness. In the "semi-automatic" operation mode, the light must always be switched on manually; switching off is done automatically.
- Manual control: The lighting can always be switched on and off manually.
- The presence detector is equipped with real daylight measurement and is designed for use with fluorescent lights (FL/PL) only.
- The square detection range of ECO-IR 360EIB-AC ensures a safe and simple planning.
- ECO-IR 180EIB-AC: walking persons are detected reliably in a range with radius of 8m. Seated persons are reliably detected within a range of 8m x 4m. The recommended mounting height is 2,2m.
- Output presence for HVAC control: the switching behaviour is only affected by presence.
- Master-Slave parallel circuit operation: a number of detectors can be connected in parallel to enlarge the detection zone. Lighting and HVAC is controlled by the Master. Any further detectors, the Slaves, supply the presence information.
- Master-Master parallel circuit operation: a number of detectors can be connected in parallel to control multiple lighting groups. Each master controls his lighting group according to its own brightness measurement. The presence continues to be detected by all detectors together.
- The test mode serves to check the presence detection and parameterization.
- Adjustment of the parameters is done with ETS or with potentiometers.

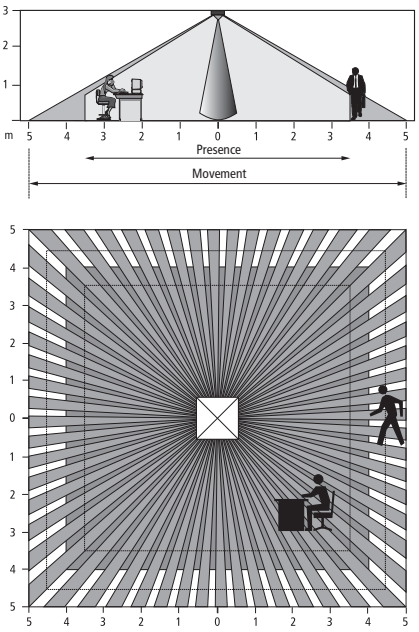
Accessories

- Suitable bus coupling unit HTS EIB/KNX (Order No. 907 0 524)
- A suitable frame for surface mounting is available separately (Order No. 907 0 512 for ECO-IR 360, Order No. 907 0 511 for ECO-IR 180).
- The unit can be flush-mounted into suspended ceilings using the QuickFix mounting kit (see page 34).

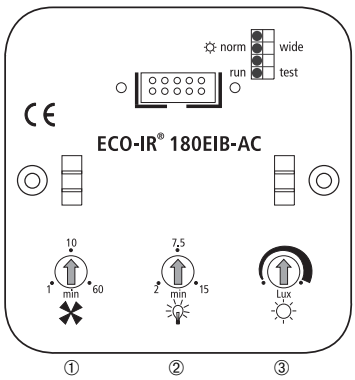
Type: ECO-IR 180EIB-AC
Detection range



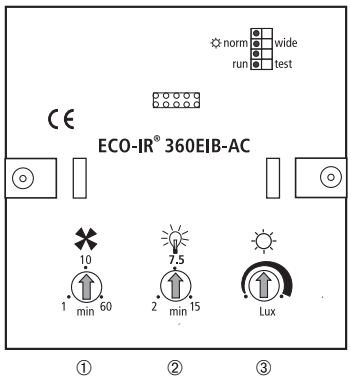
Type: ECO-IR 360EIB-AC
Detection range



Sensor Module - rear side ECO-IR 180EIB-AC



Sensor Module - rear side ECO-IR 360EIB-AC



Settings on the ECO-IR 180EIB-AC, ECO-IR 360EIB-AC

DIP Switches:
DIP2 Lux scale for normal/low switch values
DIP4 Operation mode: normal operation/test

① Switch off delay for HVAC
② Switch off delay for light
③ Brightness threshold (lux)

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
ECO-IR 180EIB-AC	180°	< 10 m	30 sec–20 min	light, HVAC, bright/dark	202 9 250
ECO-IR 360EIB-AC	360°	10 x 10 m at 3.5 m height	30 sec–20 min	light, HVAC, bright/dark	202 9 201
Bus coupling unit EIB/KNX for flush mounting					907 0 524
Accessories: Surface frame ECO-IR 180, white					907 0 511
Accessories: Surface frame ECO-IR 360, white					907 0 512

Presence detector ECO-IR DUAL-EIB

Presence detector ECO-IR DUAL-EIB

Presence detector ECO-IR DUAL-EIB

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°
- Automatic control of two lighting groups
- Dual real daylight measurement
- Two switched outputs for light
- Lighting control with two brightness threshold values and self-learning switch off delay time
- Fully or semi-automatic operation switch-selectable

Technische Daten:
Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.5 m
Maximum range: max. 8 x 8 m (Mh 2.5 m)
max. 10 x 10m (Mh 3.5m)

Real daylight measurement: approx. 100-1600 Lux, deactivatable, approx. 25-200 Lux (extended)

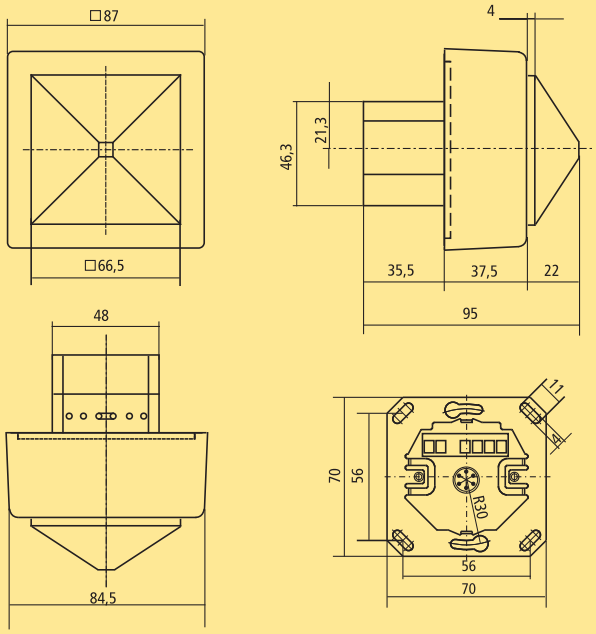
Switch off delay time: 30 sec-20 min

Mounting plate: 70 x 70 mm
Connection terminal: EIB
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...45°C
Degree of protection: IP 40

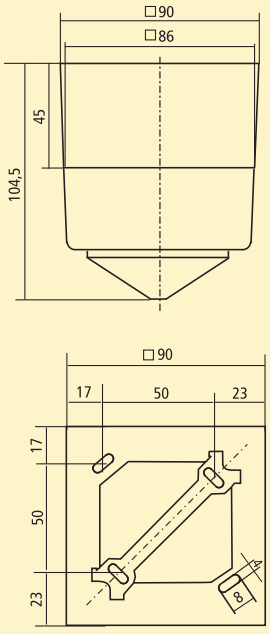
Detection range ECO-IR DUAL-EIB

M'height	seated persons	walking persons
2.0 m	4.5 m x 4.5 m	6.0 m x 6.0 m ± 0.5 m
2.5 m	6.0 m x 6.0 m	8.0 m x 8.0 m ± 0.5 m
3.0 m	7.0 m x 7.0 m	9.0 m x 9.0 m ± 0.5 m
3.5 m	8.0 m x 8.0 m	10 m x 10 m ± 1 m
4.0 m	–	11 m x 11 m ± 1 m

Dimension drawings: ECO-IR DUAL-EIB



Dimension drawings: ECO-IR DUAL-EIB mounted onto ECO-IR 360 surface frame (Accessories)



Presence detector ECO-IR DUAL-EIB

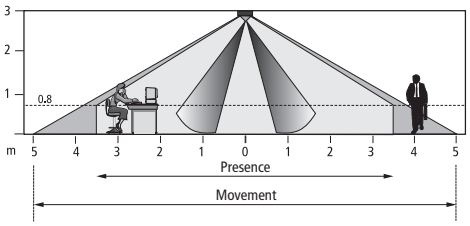
Function

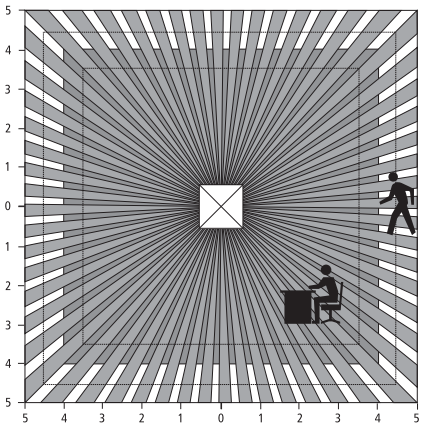
- The switching behaviour is controlled by presence and brightness.
- The lighting switches on in case of darkness and presence, and switches off in case of brightness and absence.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Fully or semi-automatic operation: in the "fully automatic" operation mode, the lighting is switched on and off automatically depending on presence and brightness. In the "semi-automatic" operation mode, the light must always be switched on manually; switching off is done automatically.
- Manual control: The lighting can always be switched on and off manually.
- The presence detector is equipped with a dual real daylight measurement and is designed for use with fluorescent lights (FL/PL) only.
- The square detection range ensures a safe and simple planning.
- Master-Slave parallel circuit operation: a number of detectors can be connected in parallel to enlarge the detection zone. Lighting and HVAC is controlled by the Master. Any further detectors, the Slaves, supply the presence information.
- Master-Master parallel circuit operation: a number of detectors can be connected in parallel to control multiple lighting groups. Each master controls his lighting group according to its own brightness measurement. The presence continues to be detected by all detectors together.
- The test mode serves to check the presence detection and parameterization.

Accessories

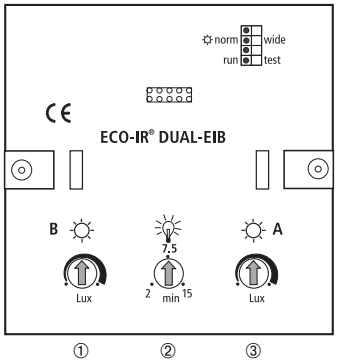
- Adjustment of the parameters is done with ETS or with potentiometers.
- Suitable bus coupling unit HTS EIB/KNX (Order No. 907 0 524).
- A suitable frame for surface mounting is available separately (Order No. 907 0 512).
- The unit can be flush-mounted into suspended ceilings using the QuickFix mounting kit (see page 34).

Detection range (mounting height 3.0 m)





Sensor Module - rear side



Settings on the ECO-IR DUAL-EIB

DIP Switches:
DIP2 Lux scale for normal/low switch values
DIP4 Operation mode: normal operation/test

① Brightness threshold (Lux B)
② Switch off delay for light
③ Brightness threshold (Lux A)

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
ECO-IR DUAL-EIB	360°	10 x 10 m at 3.5 m height	30 sec–20 min (light)	2 x light	202 9 200
Bus coupling unit EIB/KNX for flush mounting					907 0 524
Accessories: Surface frame ECO-IR 360, white					907 0 512

Presence detector compact office 24V

Presence detector compact office 24V

Presence detector compact office 24V

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°
- Automatic HVAC and lighting control as well as room surveillance
- Mixed light measurement
- Voltage supply 24V AC/DC
- Switched output for light (potential-free relay)
- Lighting control with brightness threshold value and self-learning switch off delay time
- Pulse function for staircase lighting timer
- Switched output for presence (potential-free relay)
- HVAC control with switch on delay and switch off delay time
- Reduced response characteristic for room surveillance
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data:
Rated voltage: 24 V AC/DC ± 20 %

Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.0 m
Maximum range: max. 6 x 6 m (Mh 2.5 m)
max. 8 x 8 m (Mh 3.5 m)

Mixed light measurement: approx. 10-1500 Lux, deactivatable
Switch off delay time: 10 sec-20 min, Short pulse

Switch off delay time for presence: 10 sec-120 min
Switch on delay for presence: 0 sec-10 min, room surveillance

Relay output A for light: Relay free of potential
Switching power: 50 W (24 V AC/DC)
460 VA (230 V AC), μ, minimal 1 V/1 mA

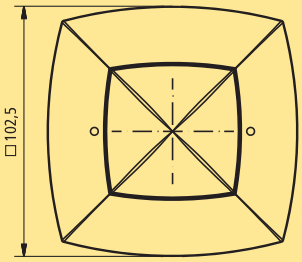
Relay output B for presence: Relay, free of potential
Switching power: 50 W (24 V AC/DC)
460 VA (230 V AC), μ, minimal 1 V/1 mA

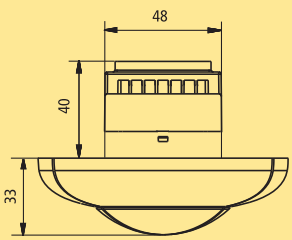
Mounting plate: 70 x 70 mm
Screw terminals: max. 2 x 2.5 mm²
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...50°C
Degree of protection: IP 40

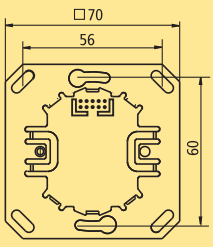
Detection range compact office 24V

M'height	seated persons	walking persons
2.0 m	3.0 m x 3.0 m	4.5 m x 4.5 m ± 0.5 m
2.5 m	4.0 m x 4.0 m	6.0 m x 6.0 m ± 0.5 m
3.0 m	4.5 m x 4.5 m	7.0 m x 7.0 m ± 1 m
3.5 m	–	8.0 m x 8.0 m ± 1 m

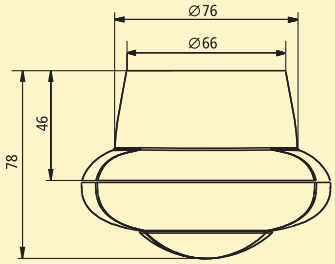
Dimension drawings: compact office 24V

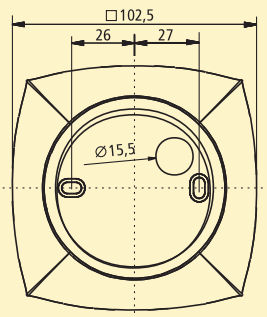






Dimension drawings: compact office 24V mounted onto compact surface frame (Accessories)





Presence detector compact office 24V

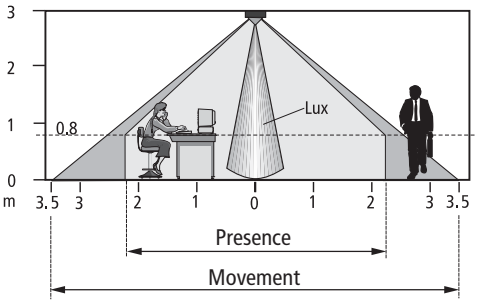
Function

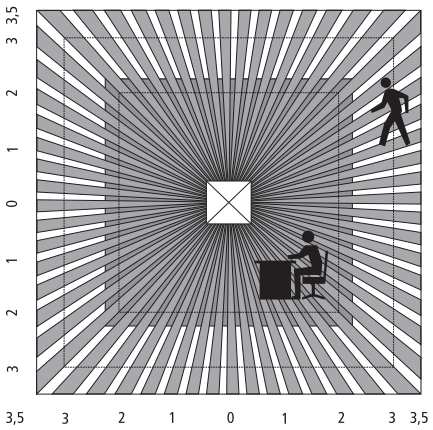
- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Pulse function: in order to control existing staircase lighting timers, the switch off delay time can be set to "Pulse".
- The presence detector is equipped with a mixed light measurement and is designed for use with fluorescent lights (FL/PL) as well as halogen/incandescent lights.
- The square detection range ensures a safe and simple planning.
- Switched output for presence, used for HVAC control: the switching behaviour of the potential-free contact is only affected by presence.
- The switch on delay prevents that the system is switched on immediately. The contact does not close before the switch on delay time has elapsed.
- Room Surveillance: the sensitivity of the switched output for presence is reduced. The contact reliably indicates the presence of persons.
- The test mode serves to check the presence detection and the wiring.

Accessories

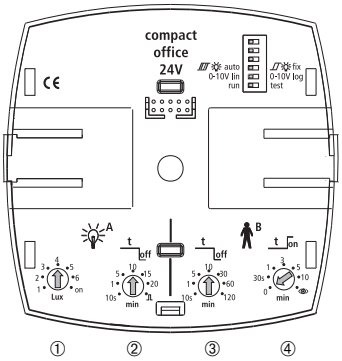
- Adjustment of the parameters is done with potentiometers or with the service remote control QuickSet plus (optionally, Order No. 907 0 532).
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No. 907 0 514).

Detection range (mounting height 3.0 m)





Sensor Module - rear side

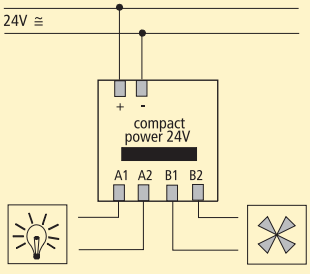


Settings on the compact office 24V

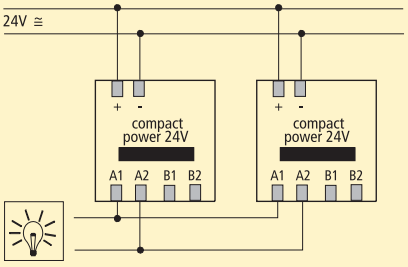
DIP Switches:
DIP4: Automatic or fixed lighting measurement
DIP5: No function with the compact office 24V
DIP6: Operation mode: normal operation/test

① Brightness threshold (Lux)
② Switch off delay for light/activation of pulse function
③ Switch off delay for presence (HVAC/surveillance)
④ Switch on delay for HVAC/activation of room surveillance-function

Wiring diagrams for power modules:



Single unit operation



Parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
compact office 24V	360°	8 x 8 m at 3.5 m height	10 sec–20 min (light) 10 sec–120 min (HVAC)	50 W (24 V AC/DC) 460 VA (230 V AC)	201 4 000
Accessories: Surface frame compact, white					907 0 514

Presence detector compact office 24V Lux

Presence detector compact office 24V Lux

Presence detector compact office 24V Lux

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°
- Automatic HVAC and lighting control as well as room surveillance
- Mixed light measurement
- Voltage supply 24V AC/DC
- Switched output for light (potential-free relay)
- Lighting control with brightness threshold value and self-learning switch off delay time
- Pulse function for staircase lighting timer
- Analogue output 0-10V for brightness
- Linear or logarithmic output of brightness
- May be used as a light sensor for PLC controls
- Service remote control QuickSet plus (option)
- User remote control clic (option)

Technical data:
Rated voltage: 24 V AC/DC ± 20 %

Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.0 m
Maximum range: max. 6 x 6 m (Mh 2.5 m)
max. 8 x 8 m (Mh 3.5 m)

Mixed light measurement: approx. 10-1500 Lux, deactivatable
Switch off delay time: 10 sec-20 min, Short pulse

Relay output A for light: Relay free of potential
Switching power: 50 W (24 V AC/DC)
460 VA (230 V AC), μ, minimal 1 V/1 mA

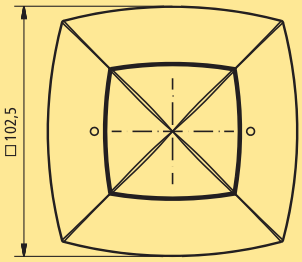
Analogue output: Output voltage 0-10 V DC
Load resistor: > 10 kΩ
Mixed light measurement: linear approx.
10-1500 Lux, logarithmic approx. 10-5000 Lux

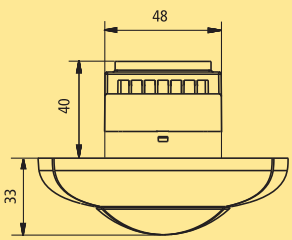
Mounting plate: 70 x 70 mm
Screw terminals: max. 2x 2.5 mm²
Size of concealed housing: Size 1 (NIS, PMI)
Ambient temperature: 0°...50°C
Degree of protection: IP 40

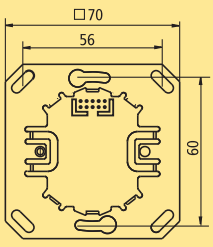
Detection range compact office 24V Lux

M'height	seated persons	walking persons
2.0 m	3.0 m x 3.0 m	4.5 m x 4.5 m ± 0.5 m
2.5 m	4.0 m x 4.0 m	6.0 m x 6.0 m ± 0.5 m
3.0 m	4.5 m x 4.5 m	7.0 m x 7.0 m ± 1 m
3.5 m	–	8.0 m x 8.0 m ± 1 m

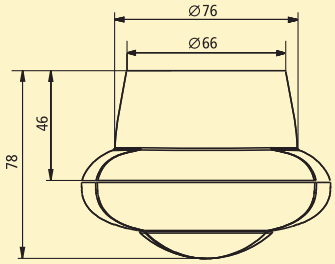
Dimension drawings: compact office 24V Lux

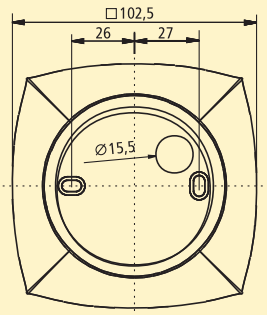






Dimension drawings: compact office 24V Lux mounted onto compact surface frame (Accessories)





Presence detector compact office 24V Lux

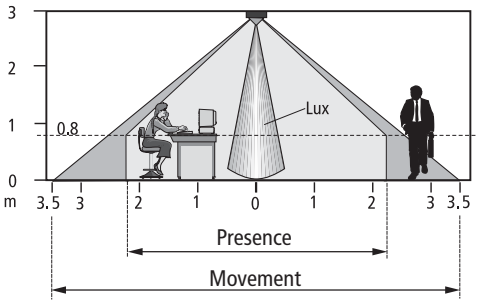
Function

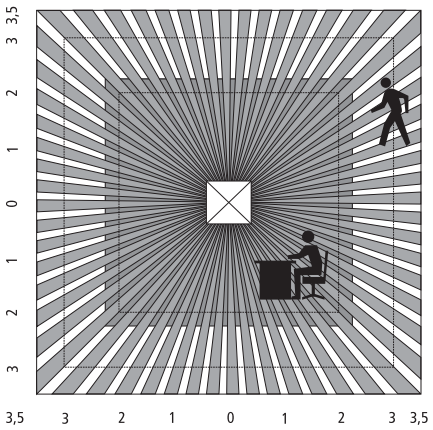
- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- Pulse function: in order to control existing staircase lighting timers, the switch off delay time can be set to "Pulse".
- The presence detector is equipped with a mixed light measurement and is designed for use with fluorescent lights (FL/PL) as well as halogen/incandescent lights.
- The square detection range ensures a safe and simple planning.
- The 0-10V analogue output provides the brightness measured by the detector's light sensor as an analogue signal. The analogue signal output can be provided either linearly or logarithmically in relation to the measured brightness. The output works independently from the presence detector.
- The test mode serves to check the presence detection and the wiring.

Accessories

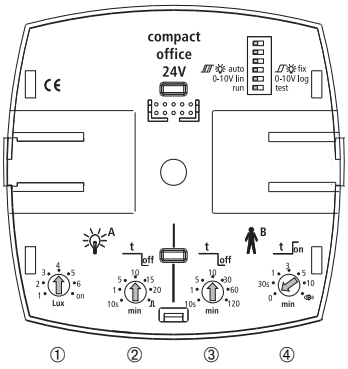
- Adjustment of the parameters is done with potentiometers or with the service remote control QuickSet plus (optionally, Order No. 907 0 532).
- The clic user remote control (Order No. 907 0 515) is optionally available for individual switching of up to two lighting groups.
- A suitable frame for surface mounting is available separately (Order No. 907 0 514).

Detection range (mounting height 3.0 m)





Sensor Module - rear side

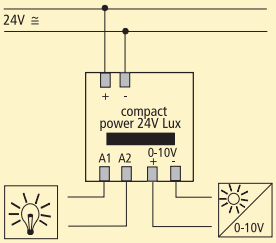


Settings on the compact office 24V Lux

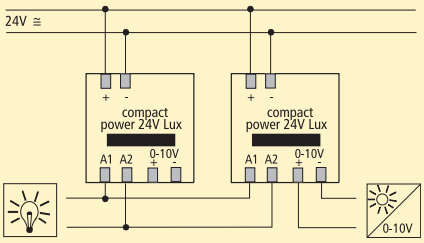
DIP Switches:
DIP4: Automatic or fixed lighting measurement
DIP5: Linear or logarithmic brightness output
DIP6: Operation mode: normal operation/test

① Brightness threshold (Lux)
② Switch off delay for light/activation of pulse function
③ No function with the compact office 24V Lux
④ No function with the compact office 24V Lux

Wiring diagrams for power modules:



Single unit operation



Parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
compact office 24V Lux	360°	8 x 8 m at 3.5 m height	10 sec–20 min and pulse function (light)	50 W (24 V AC/DC) 460 VA (230 V AC) 0-10 V (brightness)	201 4 001
Accessories: Surface frame compact, white					907 0 514

Presence detector ECO-IR 180-24V, ECO-IR 360-24V

Presence detector ECO-IR 180-24V

Presence detector ECO-IR 360-24V

Presence detector ECO-IR 180-24V

- Passive infrared presence detector for wall mounting
- Detection range 180°

Presence detector ECO-IR 360-24V

- Passive infrared presence detector for ceiling mounting
- Square detection range, 360°

Common product features

- Automatic HVAC and lighting control
- Real daylight measurement
- Voltage supply 24 V AC/DC
- Switched output for light (potential-free relay)
- Lighting control with brightness threshold value and self-learning switch off delay time
- Switched output for presence (potential-free relay)
- HVAC control with switch off delay time

Technical data ECO-IR 180-24V:
Detection range: horizontal 180°
Recommended mounting height:
approx. 1.6 m-2.2 m
Maximum range: < 10 m

Technical data ECO-IR 360-24V:
Detection range: horizontal 360°, vertical 120°
Recommended mounting height: 2.0 m-3.5 m
Maximum range: max. 8 x 8 m (Mh 2.5 m)
max. 10 x 10 m (Mh 3.5 m)

Common specifications
Rated voltage: 24 V AC/DC ± 20 %
Real daylight measurement: approx. 50-1600 Lux, deactivatable
Switch off delay time: 2 min-15 min
Switch off delay time for presence: 1 min-60 min

Relay output A for light: Relay free of potential
Switching power: 50 W (24 V AC/DC)
460 VA (230 V AC), μ, minimal 1 V/1 mA

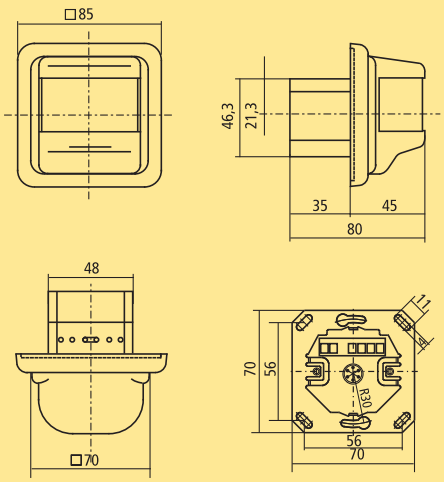
Relay output B for presence: Relay, free of potential
Switching power: 50 W (24 V AC/DC)
460 VA (230 V AC), μ, minimal 1 V/1 mA

Mounting plate: 70 x 70 mm
Terminals without screws: max. 1.5 mm²
Size of concealed housing: Size 1 (NIS,PMI)
Ambient temperature: 0°...50°C
Degree of protection: IP 40

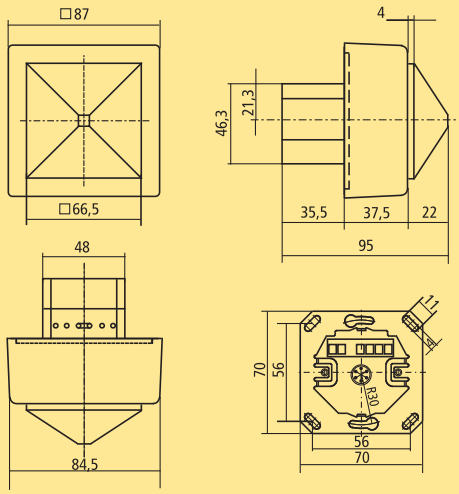
Detection range ECO-IR 360-24V

M'height	seated persons	walking persons
2.0 m	4.5 m x 4.5 m	6.0 m x 6.0 m ± 0.5 m
2.5 m	6.0 m x 6.0 m	8.0 m x 8.0 m ± 0.5 m
3.0 m	7.0 m x 7.0 m	9.0 m x 9.0 m ± 0.5 m
3.5 m	8.0 m x 8.0 m	10 m x 10 m ± 1 m
4.0 m	–	11 m x 11 m ± 1 m

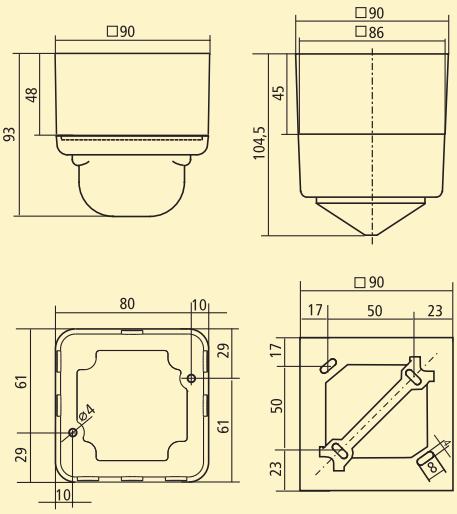
Dimension drawings: ECO-IR 180-24V



Dimension drawings: ECO-IR 360-24V



Dimension drawings: ECO-IR 180-24V/360-24V mounted onto ECO-IR 180/360 surface frame (Accessories)



Presence detector ECO-IR 180-24V, ECO-IR 360-24V

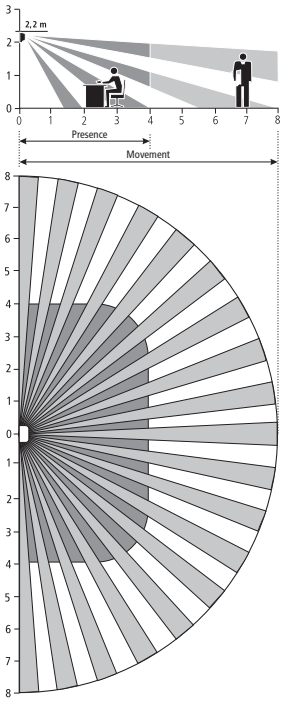
Function

- The switching behaviour is controlled by presence and brightness.
- The self-learning switch off delay time automatically adapts to the occupant's behaviour.
- The presence detector is equipped with real daylight measurement and is designed for use with fluorescent lights (FL/PL) only.
- The square detection range of ECO-IR 360-24V ensures a safe and simple planning.
- ECO-IR180-24V: walking persons are detected reliably in a range with radius of 8m. Seated persons are reliably detected within a range of 8 x 4m. The recommended mounting height is 2.2 m.
- Switched output for presence, used for HVAC control: the switching behaviour of the potential-free contact is only affected by presence.
- Adjustment of the parameters is done with potentiometers.

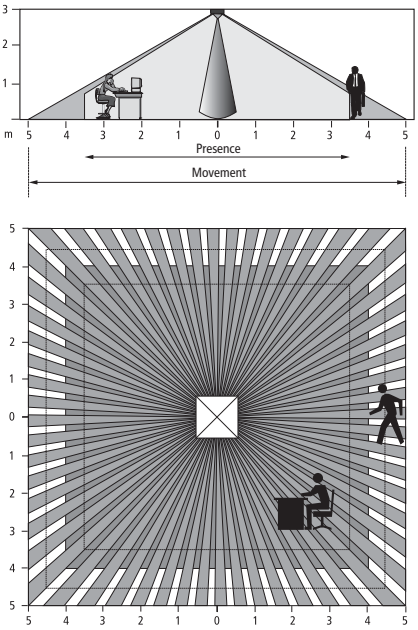
Accessories

- A suitable frame for surface mounting is available separately (Order No. 907 0 512 for ECO-IR 360 and Order No. 907 0 511 for ECO-IR 180 respectively).
- The unit can be flush-mounted into suspended ceilings using the QuickFix mounting kit (see page 34).

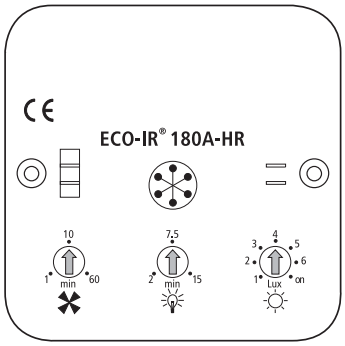
Type: ECO-IR 180-24V
Detection range



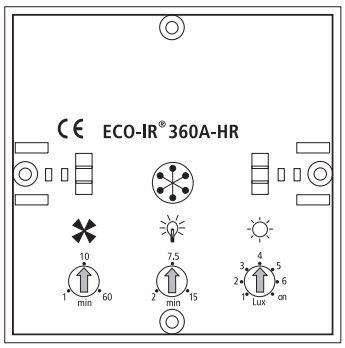
Type: ECO-IR 360-24V
Detection range



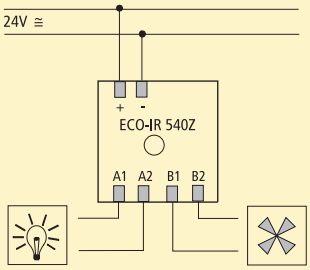
Sensor Module - rear side ECO-IR 180-24V



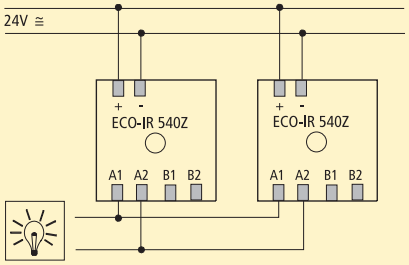
Sensor Module - rear side ECO-IR 360-24V



Wiring diagrams for power modules: ECO-IR 180-24V, ECO-IR 360-24V



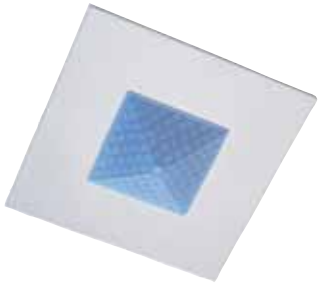
Single unit operation



Parallel circuit operation

Type	Detection range	Maximum range	Switch off delay time	Outputs	Order No.
ECO-IR 180-24V	180°	< 10 m	2 min–15 min (light)	50 W (24 V AC/DC), 460 VA (230 V AC)	202 4 050
ECO-IR 360-24V	360°	10 x 10 m at 3.5 m height	1 min–60 min (HVAC)	50 W (24 V AC/DC), 460 VA (230 V AC)	202 4 000
Accessories: Surface frame ECO-IR 180, white					907 0 511
Accessories: Surface frame ECO-IR 360, white					907 0 512

Quickfix flush-mounting kit for ECO-IR 360
Quickfix-Beton flush-mounting kit for ECO-IR 360
Quicksafe ball guard protective cage for ECO-IR / compact office...

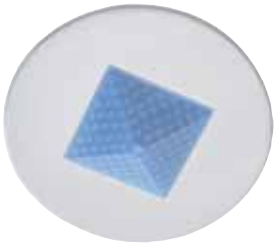


Square cover

Square cover Quickfix flush-mounting kit

- for suspended ceilings, with round or square cover
- flush-mounting installation for presence detector ECO-IR 360
- the presence detector is inset into the suspended ceiling, only the pyramidical lens remains visible
- easy to fit

Technical data:
Ceiling aperture: 139 mm
Inset depth: 100 mm
Ceiling thickness: 0.5 – 30 mm
Diameter of circular cover: 160 mm
Dimensions of square cover: 150 x 150 mm



Circular cover

Circular cover Quickfix-Beton flush-mounting kit

- for concrete ceilings, with round or quadratic cover
- flush-mounting installation for presence detector ECO-IR 360
- the presence detector is fitted into the concrete ceiling using the insert, only the pyramidical lens remains visible
- easy to fit

Technical data:
Dimensions of flush-mount box: 116 x 116 x 140 mm
Diameter of circular cover: 160 mm
Dimensions of square cover: 150 x 150 mm

Quicksafe ball guard protective cage

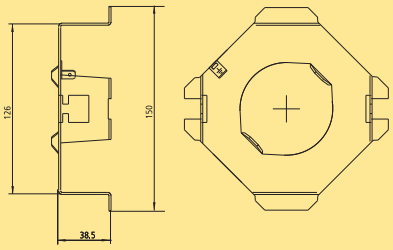
Quicksafe ball guard protective cage for ECO-IR/ compact office:

- excellent protection against mechanical damage
- robust and sturdy design
- exceptionally impact-resistant and vandal-resistant
- colour: RAL white 9010
- including 6 screws, 3 ceiling plugs and 3 distance sleeves

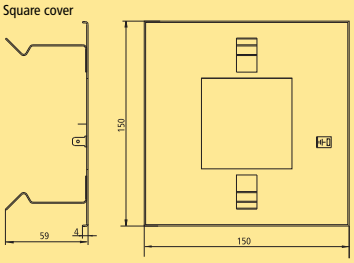
Technical data:
Diameter: approx. 200 mm
Height: approx. 70 mm or 160 mm with distance sleeves

Dimension drawings: Quickfix flush-mounting kit

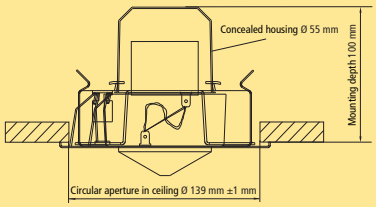
Housing



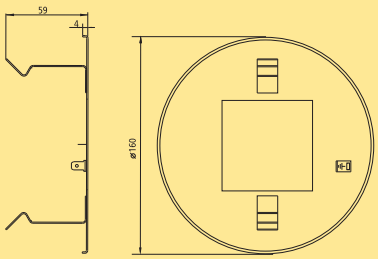
Square cover



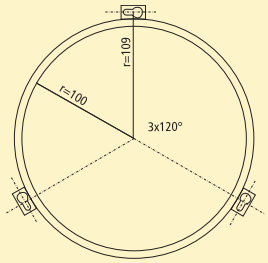
Flush-mounting kit with cover



Circular cover



Dimension drawings: Quicksafe ball guard protective cage for ECO-IR/ compact office housing



Type	Order No.
QuickFix flush-mounting housing for presence detector ECO-IR 360, including box	907 0 522
Circular cover for QuickFix	907 0 517
Square cover for QuickFix	907 0 516
QuickFix Beton flush-mount box for presence detector ECO-IR 360	907 0 521
Circular cover for QuickFix Beton	907 0 519
Square cover for QuickFix Beton	907 0 518
QuickSafe ball guard protective cage for ECO-IR/ compact office..., white, metal	907 0 531

Accessories

Service remote control QuickSet plus

Service remote control QuickSet plus

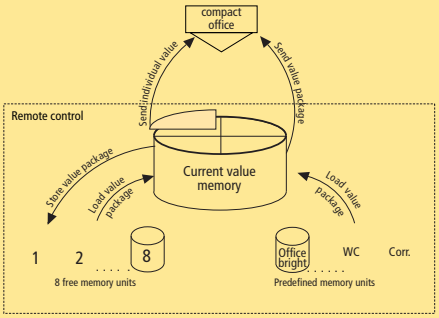
Service remote control QuickSet plus

- Infrared remote control for convenient setting up of HTS presence detectors
- Quick adaptation to changing service conditions without dismantling the detector
- Transmission of individual settings or complete value packages to the detector
- Retrieval of predefined value packages for typical rooms
- Storage and retrieval of 8 user-defined value packages
- Text-driven operator guidance in the display

Function

- The Service remote control QuickSet plus allows the installer an efficient setting-up of the detector and flexible adaptation to changed service conditions.
- Setting of all potentiometer values at the touch of a button.
- Call up of functions such as Test/Reset.
- The settings made with QuickSet plus are retained even in the event of electricity failure or if the detector is reset.
- Frequently used settings can be stored and, if necessary, retrieved at any time and transmitted as value packages to various detectors.
- Typeical value packages are predefined in the QuickSet plus for various rooms (office, corridor, toilets, etc.…).
- Self-defined settings can be stored in the QuickSet plus as a value package. Eight free memory units are available for each detector type.

Technical data:
Voltage supply: Batteries 9 V, 1 x Type PP3 / 6F22
Transmission medium: Infrared
Maximum range: approx. 4 m (compact, PresenceLight)
approx. 8 m (ECO-IR)
Transmission angle: ± 15°
Dimensions: 140 x 62 x 30 mm
Temperature range: 0°...50° C
Colour: Black



Accessories

User remote control clic

User remote control clic

User remote control clic

- Infrared remote control for HTS presence detectors
- Switching and dimming of lighting, scene control
- 2 channels for 2 lighting groups
- 2 programmable scenes
- 5 group addresses for channel separation
- Coding switch and programming key for easy allocation of lighting groups and channels

Function

- The user remote control clic disposes of two channels for the control of two lighting groups.
- clic allows switching and dimming of up to two lighting groups.
- Define and save lighting scenes.
- Settings of the presence detector cannot be changed with clic.
- Possibility of choosing the function of every key in conjunction with presence detector compact office EIB.

Technical data:
Voltage supply: Batteries 2 x 1,5V, Type LR03/AAA
Transmission medium: Infrared
Maximum range: approx. 10 m
Transmission angle: ± 15°
Dimensions: 120 x 57 x 24 mm
Temperature range: 0°...50° C
Colour: Light grey

Type	Order No.
Service remote control QuickSet plus (Text-driven operator guidance in german, english and french)	907 0 532
User remote control clic	907 0 515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theben
for specialists

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