# **thebenHTS** Presence detector



















ECO-IR 180A

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

### ECO-IR 360A

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

### Gemeinsame Merkmale

- 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  $\pm$  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: 12 x (1 x 58 W), 6 x (2 x 58 W), 18 x (1 x 36 W), 9 x (2 x 36 W), 18 x (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 mm<sup>2</sup> Size of concealed housing: Size 1 (NIS, PMI) Ambient temperature: 0 °C...+50 °C Protection class II: EN 60730-1

Housing colour: RAL 9010

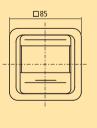


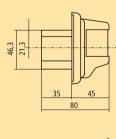
Dimension drawings: ECO-IR 180A

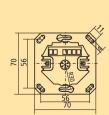
# **Detection range ECO-IR 360A**

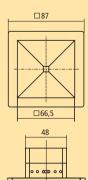
M'height	seated persons	walking persons
2.0 m	4.5 m x 4.5 m	$6.0 \text{ m} \times 6.0 \text{ m} \pm 0.5 \text{ m}$
2.5 m	6.0 m x 6.0 m	$8.0 \text{ m} \times 8.0 \text{ m} \pm 0.5 \text{ m}$
3.0 m	7.0 m x 7.0 m	$9.0 \text{ m} \times 9.0 \text{ m} \pm 0.5 \text{ m}$
3.5 m	8.0 m x 8.0 m	10 m x 10 m ± 1 m
4.0 m	_	11 m x 11 m ± 1 m

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

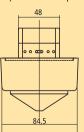


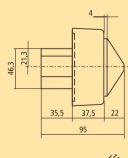


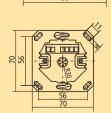


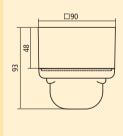


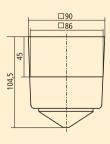
Dimension drawings: ECO-IR 360A

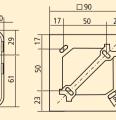












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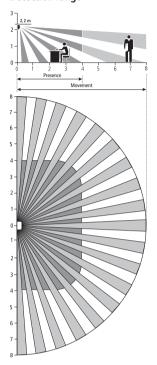
### Function

- 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.

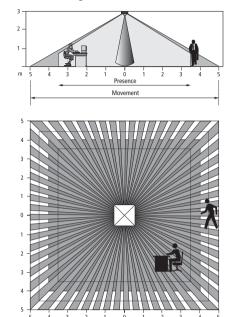
### Accessories

- 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 84).

## Type: ECO-IR 180A Detection range



## Type: ECO-IR 360A Detection range



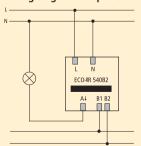
## Sensor Module - rear side ECO-IR 180A



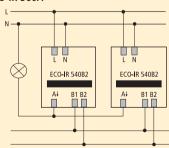
## Sensor Module - rear side ECO-IR 360A



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



Single unit operation



Parallel circuit operation

Туре	Detection range	Maximum range	Switch off delay time Switch off delay time presen	Outputs ce	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 (HVAC)	1400 VA (light), 100 W (presence)	202 0 000	
Accessories: Surface fr	ame ECO-IR 180, white	2			907 0 511	
Accessories: Surface frame ECO-IR 360, white						