

## Features

### Movement detector

- Extensive sensing area up to 120m<sup>2</sup>
- Two sensing areas (type 18.51):  
"presence" suitable for zones of low activity,  
and "movement" suitable for transit areas or  
zones of high activity
- Modern design
- Quick installation thanks to push-in terminals
- 1 NO contact 10 A, with "zero crossing"  
switching
- Wall mounting compatible with 60 mm box  
and 502 box

18.41/18.51/18.61  
Push-in terminal



For outline drawings see page 5

| Contact specification                              |  |                       |                       |                       |
|----------------------------------------------------|--|-----------------------|-----------------------|-----------------------|
| Number of contacts                                 |  | 1 NO (SPST-NO)        | 1 NO (SPST-NO)        | 1 NO (SPST-NO)        |
| Rated current/Maximum peak current A               |  | 10 / 20 (100 A 5 ms)  | 10 / 20 (100 A 5 ms)  | 10 / 20 (100 A 5 ms)  |
| Rated voltage/Maximum switching voltage V AC       |  | 250 / 400             | 250 / 400             | 250 / 400             |
| Rated load AC1 VA                                  |  | 2,500                 | 2,500                 | 2,500                 |
| Rated load AC15 VA                                 |  | 450                   | 450                   | 450                   |
| Nominal lamp rating: 230V incandescent/halogen W   |  | 1,000                 | 1,000                 | 1,000                 |
| fluorescent tubes with electronic ballast W        |  | 500                   | 500                   | 500                   |
| fluorescent tubes with electromechanical ballast W |  | 350                   | 350                   | 350                   |
| CFL W                                              |  | 300                   | 300                   | 300                   |
| 230V LED W                                         |  | 300                   | 300                   | 300                   |
| LV halogen or LED with electronic ballast W        |  | 300                   | 300                   | 300                   |
| LV halogen or LED with electromechanical ballast W |  | 500                   | 500                   | 500                   |
| Standard contact material                          |  | AgSnO <sub>2</sub>    | AgSnO <sub>2</sub>    | AgSnO <sub>2</sub>    |
| Supply specification                               |  |                       |                       |                       |
| Coil specification V AC (50/60 Hz)                 |  | 110...230             | 110...230             | 110...230             |
| Rated power VA (50 Hz)/ W                          |  | 1.5 / 1               | 1.5 / 1               | 1.5 / 1               |
| Operating range V AC (50/60 Hz)                    |  | 96...253              | 96...253              | 96...253              |
| Technical data                                     |  |                       |                       |                       |
| Electrical life at rated load AC1 cycles           |  | 100 · 10 <sup>3</sup> | 100 · 10 <sup>3</sup> | 100 · 10 <sup>3</sup> |
| Ambient light intervention threshold lx            |  | 1...500               | 1...500               | 1...500               |
| Light on time after last detection                 |  | 12 s...35 min         | 12 s...35 min         | 12 s...35 min         |
| Sensing area diameter                              |  | See diagram page 4    | See diagram page 4    | See diagram page 4    |
| Ambient temperature range °C                       |  | -10...+50             | -10...+50             | -10...+50             |
| Protection category                                |  | IP 40                 | IP 40                 | IP 40                 |
| Approvals (according to type)                      |  | CE                    |                       |                       |

## Ordering information

Example: 18 series, movement detector for corridors, recessed or surface mounting, 1 NO (SPST-NO) 10 A contact, 110...230 V AC supply.

1 8 . 5 1 . 8 . 2 3 0 . 0 3 0 0

Series

Type

4 = Movement detector for corridors

5 = Movement and presence detector

6 = Movement detector wall mounting

No. of poles

1 = Single pole switching 1 NO (SPST-NO), 10 A

Contact circuit

3 = Volt-free output contact

Supply voltage

230 = 110...230 V

Supply version

8 = AC (50/60Hz)

Codes

18.41.8.230.0300

18.51.8.230.0300

18.61.8.230.0300

## Technical data

## EMC specifications

| Type of test                                            |                                           | Reference standard   |                       |
|---------------------------------------------------------|-------------------------------------------|----------------------|-----------------------|
| Electrostatic discharge                                 | contact discharge                         | EN 61000-4-2         | 4 kV                  |
|                                                         | air discharge                             | EN 61000-4-2         | 8 kV                  |
| Radiated electromagnetic field (80 ... 2,000 MHz)       |                                           | EN 61000-4-3         | 3 V/m                 |
| Fast transients<br>(burst 5/50 ns, 5 and 100 kHz)       | on supply terminals                       | EN 61000-4-4         | 1 kV                  |
| Voltage pulses on supply terminals<br>(surge 1.2/50 µs) | common mode                               | EN 61000-4-5         | 4 kV                  |
|                                                         | differential mode                         | EN 61000-4-5         | 4 kV                  |
| Radiofrequency common<br>mode voltage (0.15...230 MHz)  | on supply terminals                       | EN 61000-4-6         | 3 V                   |
| Voltage dips                                            | 70 % U <sub>N</sub> , 40 % U <sub>N</sub> | EN 61000-4-11        | 10 cycles             |
| Short interruptions                                     |                                           | EN 61000-4-11        | 10 cycles             |
| Radiofrequency conducted emissions                      | 0.15...30 MHz                             | EN 55014             | class B               |
| Radiated emissions                                      | 30...1,000 MHz                            | EN 55014             | class B               |
| <b>Terminals</b>                                        |                                           | <b>solid cable</b>   | <b>stranded cable</b> |
| Type                                                    |                                           | push-in (see pag. 3) |                       |
| Max. wire size                                          | mm <sup>2</sup>                           | 2.5                  | 2.5                   |
|                                                         | AWG                                       | 14                   | 14                    |
| Wire strip length                                       | mm                                        | 8                    |                       |
| <b>Other data</b>                                       |                                           |                      |                       |
| Power lost to the environment                           | without output current W                  | 0.3                  |                       |
|                                                         | with rated output current W               | 1.4                  |                       |

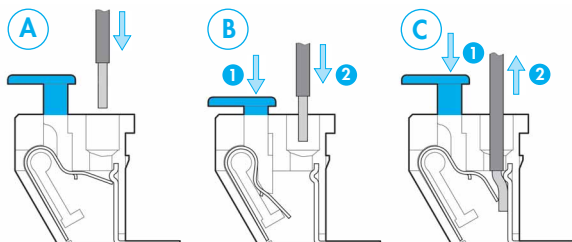
## Main features

### Push-in terminals

The push-in terminals permit the quick connection of solid wires or ferrules by their simple insertion into the terminal (A).

It is possible to open the terminal to extract the wire by first pushing down on the push-button using a screwdriver or fingers (C).

For stranded cable it is necessary first to open the terminal using the push button, both for the extraction (C) and insertion (B).



Double terminals for the easy "looping" between multiple 18 Series.  
The Max. wire size for each terminal is 2.5 mm<sup>2</sup>.

The terminals are equipped with a test hole to take a test probe.

## Settings

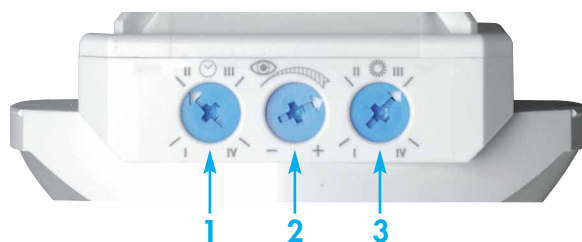
The **ambient light intervention threshold** can be set from the lowest value (about 1 lx) to the optimal value for offices and working area (about 500 lx), with the possibility to exclude totally the intervention of the light sensor (set to ∞ lx).

To optimize energy saving, it is suggested to set the intervention threshold after consideration of the minimum natural light levels appropriate to the safety and comfort of the application.

#### Lux (3):

- I. Min. level (about 1 lx)
- II. Transit area (> 10 lux)
- III. Offices – work area (about 500 lx)
- IV. Always ON (∞ lx)

The **sensitivity control** (2) is pre-set at maximum sensitivity, and this will be suitable for most applications. Setting a lower level of sensitivity will have the effect of reducing the sensing area and ignoring smaller movements - which might be necessary depending on the application.

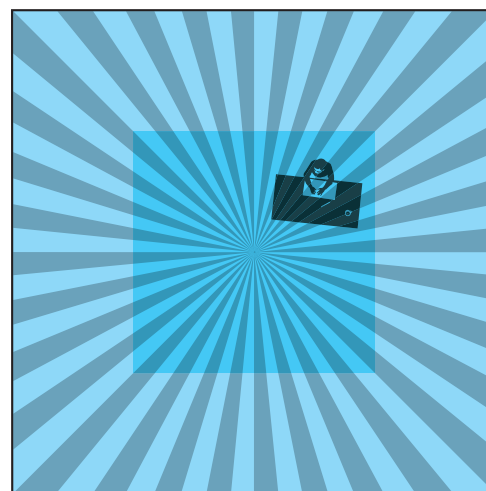
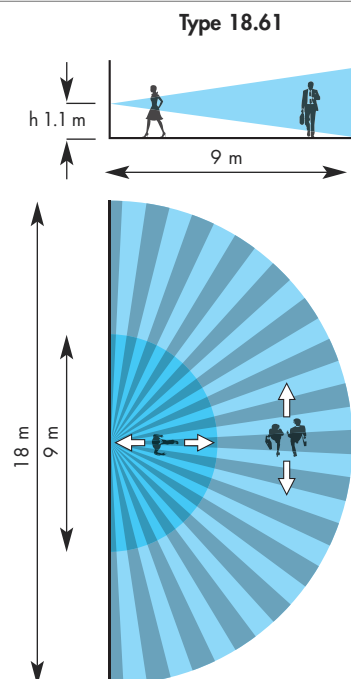
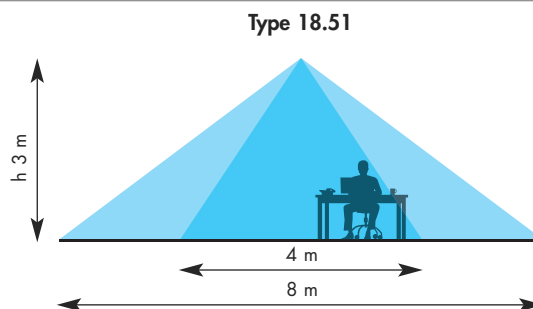
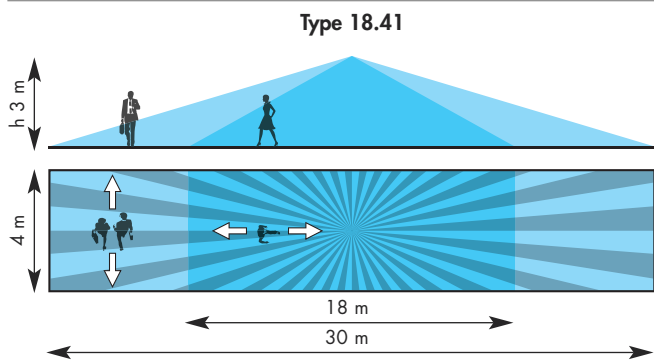


The **light on time** (1) following last detection can be regulated between 12 seconds to 35 minutes.

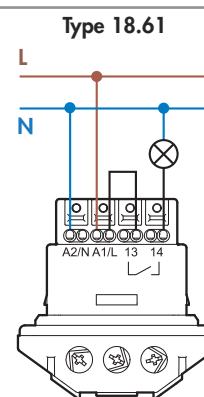
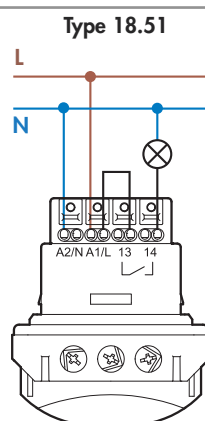
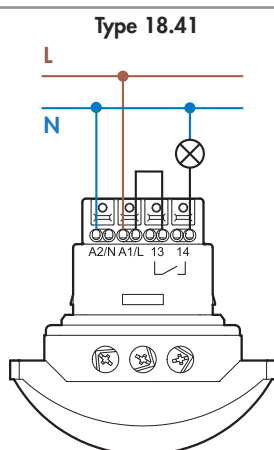
Time:

- I. 12 seconds
- II. 3 minutes
- III. 15 minutes
- IV. 35 minutes

## Sensing area

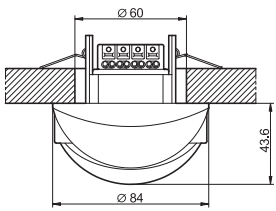
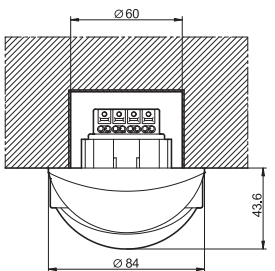
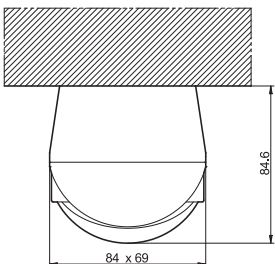
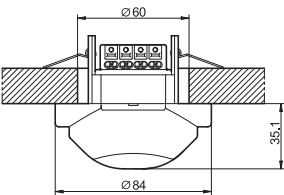
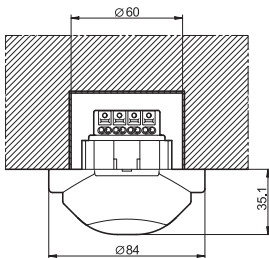
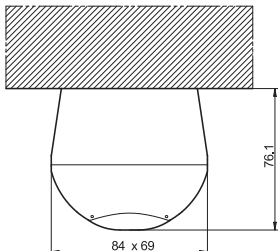
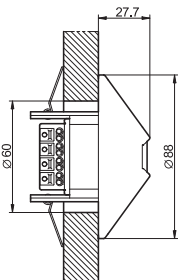
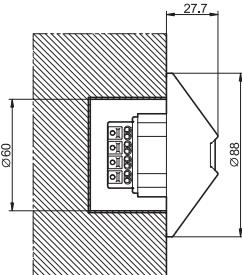


## Wiring diagram

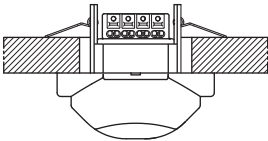
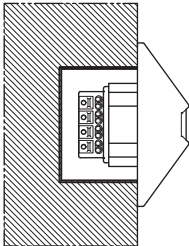
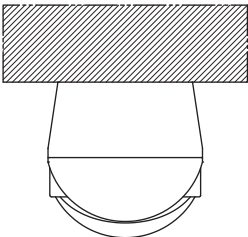


The nominal lamp rating as stated in the contact specification applies when wiring is realized in accordance with the diagrams above. If the load is powered from a phase different to that powering the Movement detector, then a 50 % reduction in the lamp rating must be considered.

## Outline drawings

| Type  | Suspended ceiling mounting                                                         | Recess mounting                                                                     | Surface mounting                                                                    |
|-------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 18.41 |   |   |  |
| 18.51 |   |   |  |
| 18.61 |  |  |                                                                                     |

## Accessories

| Type  | Suspended ceiling mounting                                                          | Solid wall or ceiling mount                                                         | Surface mounting                                                                      |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       |  |  |  |
|       | 60 mm diameter, mounting in ceilings up to 25 mm thickness                          | Compatible with 60 mm box or rectangular box (type 502)                             | Fix by screw included in the packaging                                                |
| 18.41 | •                                                                                   | •                                                                                   | •                                                                                     |
| 18.51 | •                                                                                   | •                                                                                   | •                                                                                     |
| 18.61 | •                                                                                   | •                                                                                   |                                                                                       |

All mounting accessories are included in the packaging – just use the one appropriate for your installation.

