

Features

Movement detector

- Extensive sensing area up to 120m²
- 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 ₂	AgSnO ₂	AgSnO ₂
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 ³	100 · 10 ³	100 · 10 ³
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 (burst 5/50 ns, 5 and 100 kHz)	on supply terminals	EN 61000-4-4	1 kV
Voltage pulses on supply terminals (surge 1.2/50 µs)	common mode	EN 61000-4-5	4 kV
	differential mode	EN 61000-4-5	4 kV
Radiofrequency common mode voltage (0.15...230 MHz)	on supply terminals	EN 61000-4-6	3 V
Voltage dips	70 % U _N , 40 % U _N	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
Terminals		solid cable	stranded cable
Type		push-in (see pag. 3)	
Max. wire size	mm ²	2.5	2.5
	AWG	14	14
Wire strip length	mm	8	
Other data			
Power lost to the environment	without output current W	0.3	
	with rated output current W	1.4	

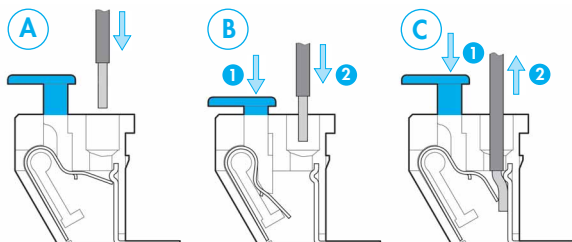
Main features

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 mm².

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

Settings

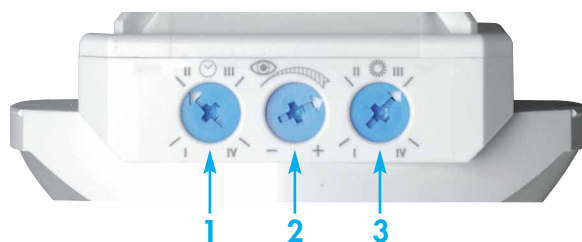
The **ambient light intervention threshold** can be set from the lowest value (about 1 lx) to the optimal value for offices and working area (about 500 lx), with the possibility to exclude totally the intervention of the light sensor (set to ∞ lx).

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.

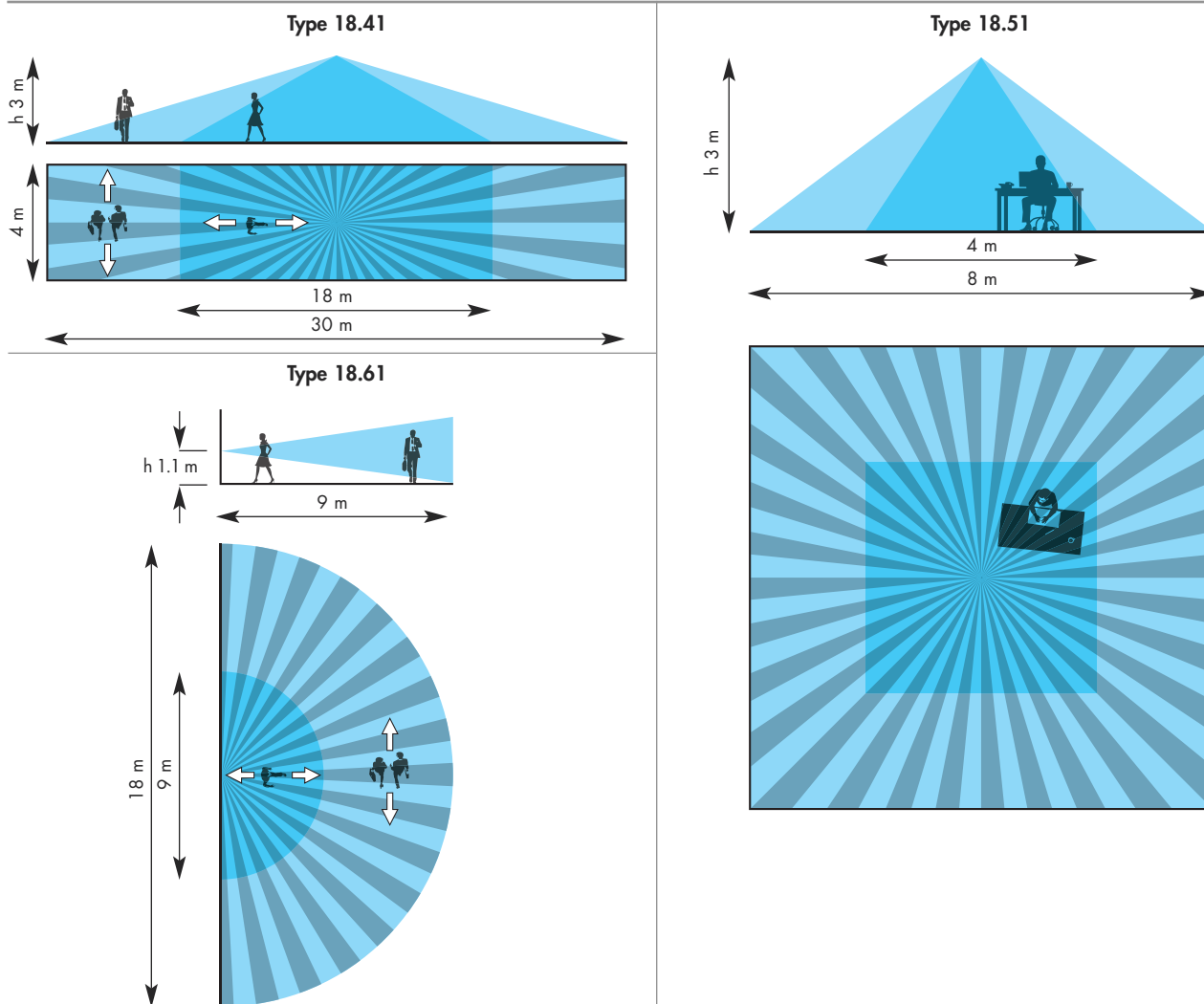


The **light on time** (1) following last detection can be regulated between 12 seconds to 35 minutes.

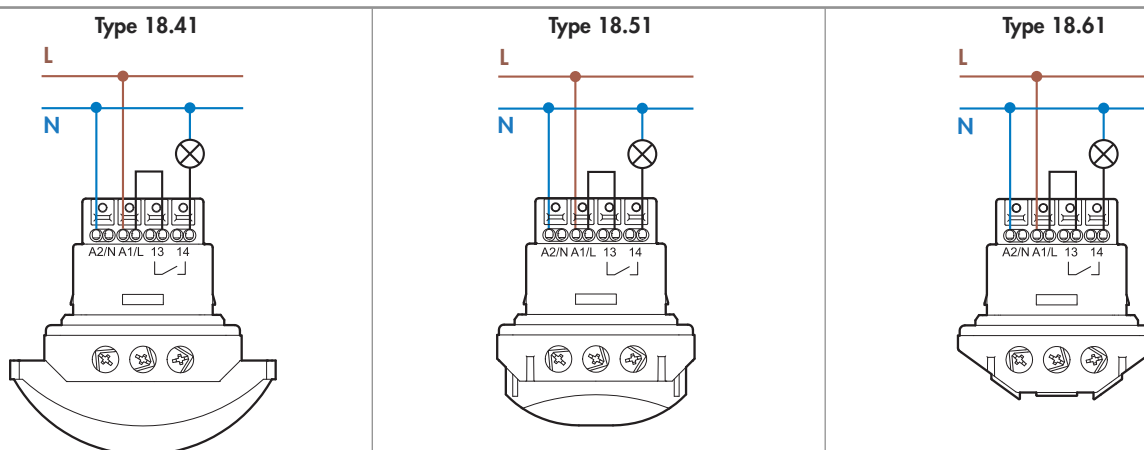
Time:

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

Sensing area

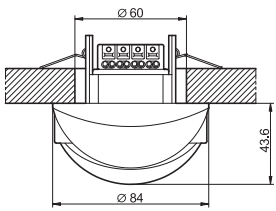
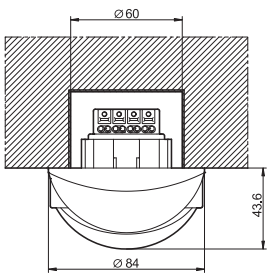
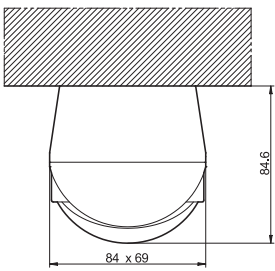
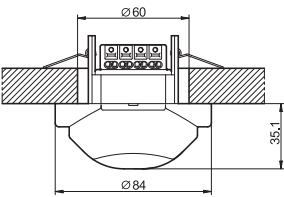
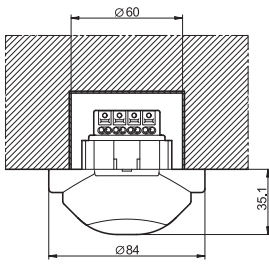
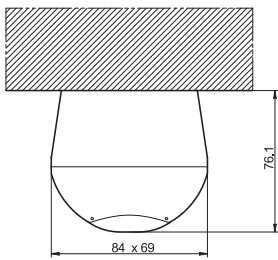
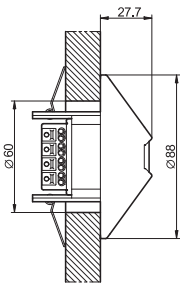
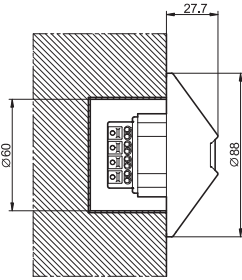


Wiring diagram

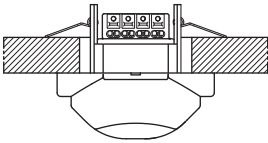
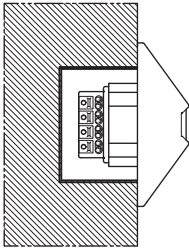
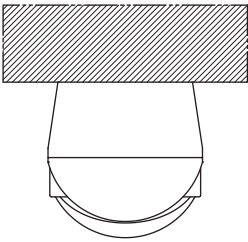


The nominal lamp rating as stated in the contact specification applies when wiring is realized in accordance with the diagrams above. If the load is powered from a phase different to that powering the Movement detector, then a 50 % reduction in the lamp rating must be considered.

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.

