

## 18 Series - Movement and presence detector 10 A

#### **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"
- Wall mounting compatible with 60 mm box and 502 box

18.41/18.51/18.61 Push-in terminal





18.41





- Applications: hotel and office corridors, transit areas
- Sensing area 30 meters length and 4 meters width









• Specific product for wall mounting

18.61

- Wide angle: 180°
- Applications: offices, schools, zones of low activity
  - "presence" and "movement"
     Sensing area 360°

• Two sensing areas:

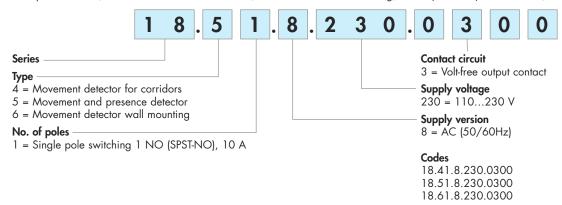
For outline drawings see page 5			
Contact specification			
Number of contacts	1 NO (SPST-NO)	1 NO (SPST-NO)	1 NO (SPST-NO)
Rated current/Maximum peak current A	10 / 20 (100 A 5 ms)	10 / 20 (100 A 5 ms)	10 / 20 (100 A 5 ms)
Rated voltage/Maximum switching voltage V AC	250 / 400	250 / 400	250 / 400
	·		
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)	110230	110230	110230
Rated power VA (50 Hz)/ W	1.5 / 1	1.5 / 1	1.5 / 1
Operating range V AC (50/60 Hz)	96253	96253	96253
Technical data			
Electrical life at rated load AC1 cycles	100 · 10³	100 · 10³	100 · 10³
Ambient light intervention threshold lx	1500	1500	1500
Light on time after last detection	12 s35 min	12 s35 min	12 s35 min
Sensing area diameter	See diagram page 4	See diagram page 4	See diagram page 4
Ambient temperature range $^{\circ}C$	-10+50	-10+50	-10+50
Protection category	IP 40	IP 40	IP 40
Approvals (according to type)		C€	



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## **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.



#### 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	on supply terminals	EN 61000-4-4	1 kV
(burst 5/50 ns, 5 and 100 kHz)			
Voltage pulses on supply terminal	common mode	EN 61000-4-5	4 kV
(surge 1.2/50 µs)	differential mode	EN 61000-4-5	4 kV
Radiofrequency common	on supply terminals	EN 61000-4-6	3 V
mode voltage (0.15230 MHz)			
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 emissi	ons 0.1530 MHz	EN 55014	class B
Radiated emissions	301,000 MHz	EN 55014	class B
Terminals		solid cable	stranded cable
Туре		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	

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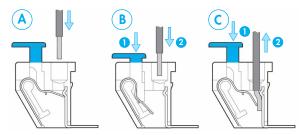


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# Main features Push-in terminals

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**

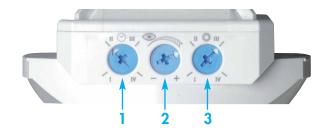
The **ambient light intervention threshold** can be set from the lowest value (about 1 lx) to the optimal value for offices and working area (about 500lx), with the possibility to exclude totally the intervention of the light sensor (set to  $\infty$  lx).

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.



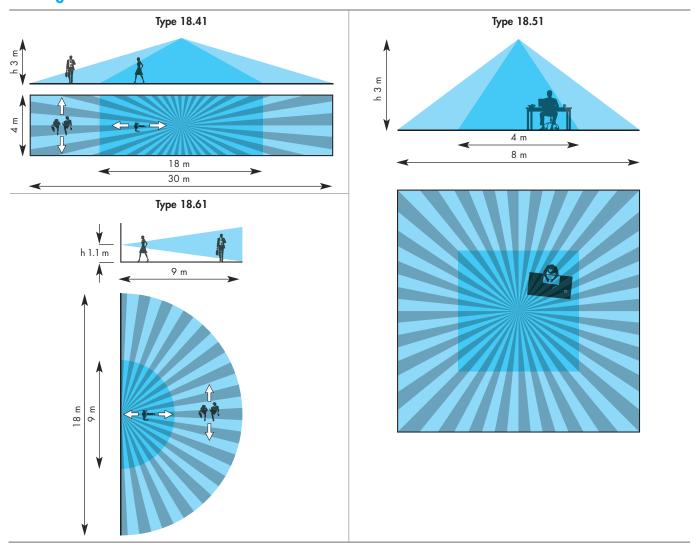
The light on time (1) following last detection can be regulated between 12 seconds to 35 minutes.

Time:

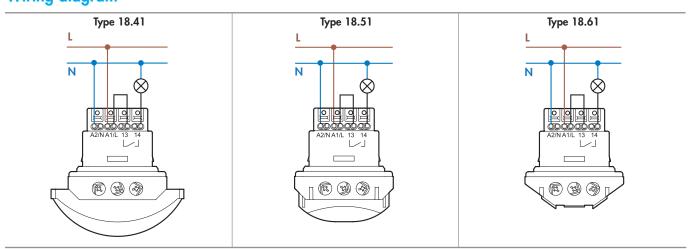
- I. 12 seconds
- II. 3 minutes
- III. 15 minutes
- IV. 35 minutes

## **finder**

#### 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**

Туре	Suspended ceiling mounting	Recess mounting	Surface mounting
18.41	Ø 60 Ø 60	Ø 60 Ø 60 Ø 84	96 84 x 69
18.51	Ø 60 Ø 84	Ø 60 Ø 84	84 x 69
18.61	27.7	27.7	

#### **Accessories**

Туре	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.