

PIR movement and presence detectors 10 A



Hotel room energy management systems



Offices, swimming baths and schools



Staircase light control



Lighting control in corridors (for hotels, offices and hospitals)



18
SERIES

PIR movement detectors for indoor or outdoor installations - wall mounting

Type 18.01

- Indoor installation
- Surface mounting

Type 18.11

- Outdoor installation (IP 54)
- Surface mounting

Type 18.A1

- Outdoor installation (IP 55)
- Terminal for PE connection
- Push-in terminals

- Output contact connected to supply live
- Small size
- Adjustable ambient light intervention threshold
- Adjustable Light ON Time
- Universal mounting position - permits the selection of any area for survey
- Wide angle of survey

18.01/18.11
Box clamp



18.A1
Push-in terminal



NOTE: with 110...125 V AC supply, the Ratings (AC1, AC15 and lamp loads) must be reduced by 50 % (e.g. 500 W instead of 1000 W)

For outline drawings see page 19

Contact specification

	18.01	18.11	18.A1
Number of contacts	1 NO (SPST-NO)	1 NO (SPST-NO)	1 NO (SPST-NO)
Rated current/Maximum peak current	10/20 (100 A - 5 ms)	10/20 (100 A - 5 ms)	10/20 (100 A - 5 ms)
Rated voltage/Maximum switching voltage	230/230	230/230	230/230
Rated load AC1	2300	2300	2300
Rated load AC15 (230 V) VA	450	450	450
Nominal lamp rating 230 V:			
incandescent/halogen W	1000	1000	1000
fluorescent lamp with electronic ballast W	500	500	500
fluorescent lamp with electromagnetic ballast W	350	350	350
CFL W	150	150	150
LED 230 V W	150	150	150
halogen or LV LED with electronic ballast W	300	300	300
halogen or LV LED with electromagnetic ballast W	500	500	500
Standard contact material	AgSnO ₂	AgSnO ₂	AgSnO ₂

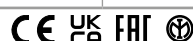
Supply specification

Coil specification	V AC (50/60 Hz)	120...230	120...230	110...230
	DC	—	—	—
Rated power AC/DC	VA (50 Hz)/W	2.5/—	2.5/—	2/0.8
Operating range	V AC (50/60 Hz)	96...253	96...253	96...253
	DC	—	—	—

Technical data

Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³	100 · 10 ³
Ambient light intervention threshold	lx	5...350	5...350	5...1000
Light ON time after last detection		10 s...12 min	10 s...12 min	10 s...20 min
Sensing area		See diagram page 16	See diagram page 16	See diagram page 16
Ambient temperature range	°C	-10...+50	-30...+50	-30...+50
Protection category		IP 40	IP 54	IP 55

Approvals (according to type)



Adjustable PIR movement detector for indoor and outdoor wall - mounting installation

Type 18.71.8.230.000x

Adjustable pir movement detector for indoor wall - mounted installation

- Surface mounting
- Automatic timing

Type 18.81.8.230.000x

Adjustable pir movement detector for outdoor wall - mounted installation

- Surface mounting
- Volt-free contact
- Switching push-button
- Adjustable Light ON Time
- Small size
- Adjustable ambient light intervention threshold
- Universal mounting position - permits the selection of any area for survey
- Wide angle of survey
- Easy mounting

18.71/18.81
Box clamp



For outline drawings see page 20

Colour

White	18.71.8.230.0000	18.81.8.230.0000
Anthracite gray	18.71.8.230.0002	18.81.8.230.0002

Contact specification

Number of contacts	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)
Rated voltage/		
Maximum switching voltage	V AC 230/230	230/230
Rated load AC1	VA 2300	2300
Rated load AC15	(230 V) VA 450	450

Nominal lamp rating 230 V:

incandescent/halogen W	1000	1000
fluorescent lamp with electronic ballast W	500	500
fluorescent lamp with electromagnetic ballast W	350	350
CFL W	150	150
LED 230 V W	150	150
halogen or LV LED with electronic ballast W	300	300
halogen or LV LED with electromagnetic ballast W	500	500

Standard contact material	AgSnO ₂	AgSnO ₂
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Supply specification

Coil specification	V AC (50/60 Hz)	230	230
	DC	—	—
Rated power AC/DC	VA (50 Hz)/W	5/0.5	5/0.5
Operating range	V AC (50/60 Hz)	184...253	184...253
	DC	—	—

Technical data

Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³
Ambient light intervention threshold	lx	10...350	10...350
Light ON time after last detection		18 s...15 min (automatic)	18 s...15 min
Sensing area		See diagram page 16	See diagram page 16
Ambient temperature range	°C	-10...+50	-30...+50
Protection category		IP 40	IP 55

Approvals (according to type)



NEW 18.71



- 1 NO (SPST-NO) 10 A
- Indoor installation
- Automatic Timing

NEW 18.81



- 1 NO (SPST-NO) 10 A
- Outdoor installation
- Protection category IP 55

PIR movement detectors for indoor installations - ceiling mount

Type 18.21

- Surface mounting

Type 18.31

- Recess mounting or surface mounting (only for anthracite gray version)

Type 18.31...003x

- High ceiling type (6 meter max.)
- Surface or recess mounting

- Output contact connected to supply live
- Small size
- Adjustable ambient light intervention threshold
- Adjustable Light ON Time
- Wide angle of survey

18.21/18.31/18.31...003x
Box clamp



NOTE: with 110...125 V AC supply, the Ratings (AC1, AC15 and lamp loads) must be reduced by 50 % (e.g. 500 W instead of 1000 W)

For outline drawings see page 18

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	230/230	230/230	230/230
Rated load AC1	VA	2300	2300	2300
Rated load AC15	(230 V) VA	450	450	450
Nominal lamp rating 230 V:				
incandescent/halogen W		1000	1000	1000
fluorescent lamp with electronic ballast W		500	500	500
fluorescent lamp with electromagnetic ballast W		350	350	350
CFL W		150	150	150
LED 230 V W		150	150	150
halogen or LV LED with electronic ballast W		300	300	300
halogen or LV LED with electromagnetic ballast W		500	500	500
Standard contact material		AgSnO ₂	AgSnO ₂	AgSnO ₂

Supply specification

Coil specification	V AC (50/60 Hz)	120...230	120...230	120...230
	DC	—	—	—
Rated power AC/DC	VA (50 Hz)/W	2/1	2/1	2/1
Operating range	V AC (50/60 Hz)	96...253	96...253	96...253
	DC	—	—	—

Technical data

Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³	100 · 10 ³
Ambient light intervention threshold	lx	5...350	5...350	5...350
Light ON time after last detection		10 s...12 min	10 s...12 min	30 s...35 min
Sensing area		See diagram page 16	See diagram page 16	See diagram page 16
Ambient temperature range	°C	-10...+50	-10...+50	-10...+50
Protection category		IP 40	IP 40	IP 40

Approvals (according to type)



18.21



- 1 NO 10 A
- Surface mounting

NEW 18.31



- 1 NO 10 A
- Recess mounting or surface mounting (only for anthracite gray version)



NEW 18.31...003x



- 1 NO 10 A
- High ceiling applications (up to 6 meters)
- Light ON time after last detection (30 s...35 min)


PIR movement detectors for indoor installations, with volt-free output contact
Type 18.21...0300

- Surface mounting

Type 18.31...03xx

- Recess mounting or surface mounting (only for anthracite gray version)
- Applications where interface to PLC or BMS is required
- Ceiling mounting
- Small size
- Adjustable ambient light intervention threshold
- Adjustable Light ON Time
- Wide angle of survey

18.21...0300/18.31...03xx
Box clamp



NOTE: with 110...125 V AC supply, the Ratings (AC1, AC15 and lamp loads) must be reduced by 50 % (e.g. 500 W instead of 1000 W)

For outline drawings see page 18

18.21...0300


- 1 NO 10 A
- Surface mounting

NEW 18.31...03xx


- 1 NO 10 A
- Recess mounting or surface mounting (only for anthracite gray version)

Contact specification

Number of contacts		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)
Rated voltage/ Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	2500	2500
Rated load AC15	(230 V) VA	450	450
Nominal lamp rating 230 V:			
incandescent/halogen W		1000	1000
fluorescent lamp with electronic ballast W		500	500
fluorescent lamp with electromagnetic ballast W		350	350
CFL W		150	150
LED 230 V W		150	150
halogen or LV LED with electronic ballast W		300	300
halogen or LV LED with electromagnetic ballast W		500	500
Standard contact material		AgSnO ₂	AgSnO ₂

Supply specification

Coil specification	V AC (50/60 Hz)	120...230	120...230
	V AC (50/60 Hz)/DC	24	24
Rated power AC/DC	VA (50 Hz)/W	2/1	2/1
Operating range	V AC (50/60 Hz)	96...253	96...253
	V AC (50/60 Hz)/DC	19.2...26.4	19.2...26.4

Technical data

Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³
Ambient light intervention threshold	lx	5...350	5...350
Light ON time after last detection		10 s...12 min	10 s...12 min
Sensing area		See diagram page 16	See diagram page 16
Ambient temperature range	°C	-10...+50	-10...+50
Protection category		IP 40	IP 40

Approvals (according to type)


**Movement and presence detectors
with Push-in terminals
For indoor installation**

Type 18.51

- Standard version
- Volt-free output contact

Type 18.51...0040

- Possibility to connect external push-button to force the output state
- Dynamic light compensation
- Output contact connected to supply live

Type 18.51...B300

- Programmable via Bluetooth LE (Low Energy) using Android and iOS smartphones

- Extensive sensing area up to 64 m²
- Two sensing areas:
"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 2 or 3 module box
- Double terminals for easy "looping" in and out

18.51/18.51...0040/18.51...B300

Push-in terminal



NOTE: with 110...125 V AC supply, the Ratings
(AC1, AC15 and lamp loads) must be reduced by
50 % (e.g. 500 W instead of 1000 W)

For outline drawings see page 18

18.51



- 1 NO 10 A (volt-free)
- Sensing area 360°

18.51...0040



- 1 NO 10 A (connected to
supply live)
- Sensing area 360°
- External push-button
connection
- Dynamic Light Compensation

18.51...B300



- 1 NO 10 A (volt-free)
- Sensing area 360°

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)
Rated voltage/ Maximum switching voltage	V AC	250/400	230/230
Rated load AC1	VA	2500	2300
Rated load AC15	(230 V) VA	450	450
Nominal lamp rating 230 V:			
incandescent/halogen W	1000	1000	1000
fluorescent lamp with electronic ballast W	500	500	500
fluorescent lamp with electromagnetic ballast W	350	350	350
CFL W	150	150	150
LED 230 V W	150	150	150
halogen or LV LED with electronic ballast W	300	300	300
halogen or LV LED with electromagnetic ballast W	500	500	500

Standard contact material

AgSnO₂

AgSnO₂

AgSnO₂

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...∞	1...∞	4...1000
Light ON time after last detection		12 s...35 min	12 s...35 min	12 s...25 min
Sensing area		See diagram page 16, 17	See diagram page 16, 17	See diagram page 16, 17
Ambient temperature range	°C	-10...+50	-10...+50	-10...+50
Protection category		IP 40	IP 40	IP 40

Approvals (according to type)



**Movement and presence detectors
with Push-in terminals
For indoor installation**
Type 18.5D with DALI interface

Three selectable functions:

- Daylight-linked constant light level control
- ON/OFF control with early warning
- ON/OFF control with early warning + courtesy light level

18.5D

Push-in terminal


18.5D
DALI

DALI


- Applications: offices, schools, zones of low activity
- Suitable for direct control of up to 8 DALI lighting ballasts
- Extensive sensing area up to 64 m²
- Two sensing areas:
"presence" suitable for zones of low activity, and
"movement" suitable for transit areas or zones of high activity

For outline drawings see page 18

Supply specification

Coil specification	V AC (50/60 Hz)	110...230
Rated power	VA (50 Hz)/W	1.5/1
Operating range	V AC (50/60 Hz)	96...253

Supply specification

Type of BUS		—
Supply voltage	V DC	—
Rated consumption	mA	—

Technical data

Ambient light intervention threshold	lx	10...800
Light ON time after last detection		10 s...35 min
Sensing area		See diagram page 16, 17
Ambient temperature range	°C	-10...+50
Protection category		IP 40

Approvals (according to type)


**Movement detectors with Push-in terminals
For indoor installation - with volt-free output
contact**

Type 18.41

- Corridor (ceiling) installation

- Extensive sensing area up to 120 m²
- Modern design
- Quick installation thanks to push-in terminals
- 1 NO contact 10 A, with "zero crossing" switching
- Double terminals for easy "looping" in and out

18.41

Push-in terminal



NOTE: with 110...125 V AC supply, the Ratings (AC1, AC15 and lamp loads) must be reduced by 50 % (e.g. 500 W instead of 1000 W)

For outline drawings see page 18

Contact specification

Number of contacts		1 NO (SPST-NO)
Rated current/Maximum peak current	A	10/20 (100 A - 5 ms)
Rated voltage/ Maximum switching voltage	V AC	250/400
Rated load AC1	VA	2500
Rated load AC15	VA	450
Nominal lamp rating 230 V:		
incandescent/halogen W		1000
fluorescent lamp with electronic ballast W		500
fluorescent lamp with electromagnetic ballast W		350
CFL W		150
LED 230 V W		150
halogen or LV LED with electronic ballast W		300
halogen or LV LED with electromagnetic ballast W		500

Standard contact material AgSnO₂

Supply specification

Coil specification	V AC (50/60 Hz)	110...230
Rated power	VA (50 Hz)/W	1.5/1
Operating range	V AC (50/60 Hz)	96...253

Technical data

Electrical life at rated load AC1	cycles	100 · 10 ³
Ambient light intervention threshold	lx	1...∞
Light ON time after last detection		12 s...35 min
Sensing area		See diagram page 16
Ambient temperature range	°C	-10...+50
Protection category		IP 40

Approvals (according to type)



18.41



- 1 NO 10 A
- Applications: hotel and offices corridors, transit areas
- Sensing area 30 meters length and 4 meters width

Movement detectors for indoor installation**Type 18.91**

- Wall mount installation
- External push-button connection
- Modern design
- 1 output with "zero crossing" switching
- Wall mounting compatible with 3 module housing, complete with adaptor for following frames:
 - Ave S44
 - BTicino series Axolute
 - BTicino series Living
 - BTicino series Living Light
 - BTicino series Living Light Air
 - BTicino series Matix
 - Gewiss series Chorus
 - Gewiss series System
 - Simon Urmet Nea
 - Vimar series Eikon
 - Vimar series Idea
 - Vimar series Arkè
 - Vimar Plana
- White or anthracite gray versions

18.91
Box clamp



For outline drawings see page 20

Output data

Rated voltage	V AC	230
Power max.	W	200
Power min.	W	3
Nominal lamp rating 230 V:		
incandescent/halogen W		200
toroidal electromagnetic transformers for LV halogen W		200
E-core electromagnetic transformers for LV halogen W		200
electronic transformers (ballasts) for LV halogen W		200
compact fluorescent (CFL) W		200
LED 230 V W		200
electronic transformers for LV LED W		200

Supply specification

Nominal voltage (U _N)	V AC (50/60 Hz)	230
Rated power	VA(50 Hz)/W	14/0.5
Operating range		(0.8...1.1)U _N

Technical data

Ambient light intervention threshold	lx	5...500 (anthracite gray)/6...600 (white)
Light ON time after last detection		10 s...20 min
Sensing area		See diagram page 16
Ambient temperature range	°C	-10...+50
Protection category		IP 20
Approvals (according to type)		CE UK CA

18.91

- Specifically for wall mounting
- Wide angle: 110°
- Applications: corridors, transit areas, toilets, staircases

Ordering information

Example: 18 series, PIR movement detector for indoor installations, wall mounting, 1 NO 10 A contact, 120...230 V AC supply.

1 8 . 0			1 . 8 . 2 3 0 . 0			0 0 0		
Series			Program			Special version		
Type			0 = Standard			0 = Standard version		
0 = Adjustable, indoor installation - wall mounting			B = Bluetooth programming			1 = High bay lens, colour white (only 18.31)		
1 = Adjustable, outdoor installation			Contact circuit			2 = Colour anthracite gray		
2 = Indoor ceiling installation - surface mounting			0 = Voltage output			Special version		
3 = Indoor ceiling installation - recessed mounting			0 = Volt-free output contact (only for 18.81)			0 = Standard version		
4 = PIR movement detector for corridors			3 = Volt-free output contact			0 = External push-button connection (only for 18.81)		
5 = PIR movement and presence detector			Supply voltage			2 = Ceiling and counter-ceiling mounting adapters included in packaging (only 18.31)		
7 = Adjustable, indoor installation - wall mounting, easy installation			024 = 24 V AC/DC for types 18.21/31-0300 only			3 = High bay lens, ceiling and counter-ceiling mounting adapters included in packaging (only 18.31)		
8 = Adjustable, outdoor installation - wall mounting, easy installation			230 = 120...230 V for types 18.01, 18.11, 18.21, 18.31			4 = External push-button connection (only 18.51-0040 and 18.91)		
9 = PIR movement detector wall mounting residential switch boxes			230 = 110...230 V for types 18.A1, 18.41, 18.51, 18.51.B300, 18.5D					
A = Outdoor installations IP 55, push-in terminals			230 = 230 V for type 18.71, 18.81, 18.91					
			Supply version					
			0 = AC (50/60 Hz)/DC (only 24 V)					
			8 = AC (50/60 Hz)					
			No. of poles/Output					
			1 = Single pole switching 1 NO (SPST-NO), 10 A					
			D = PIR movement and presence detector with DALI interface					
			Codes					
			18.01.8.230.0000			18.31.0.024.0300		
			18.11.8.230.0000			18.31.8.230.0000		
			18.21.0.024.0300			18.31.8.230.0022		
			18.21.8.230.0000			18.31.8.230.0031		
			18.21.8.230.0300			18.31.8.230.0032		
						18.31.8.230.0300		
						18.31.8.230.0322		
						18.41.8.230.0300		
						18.51.8.230.0040		
						18.51.8.230.0300		
						18.51.8.230.B300		
						18.71.8.230.0000		
						18.71.8.230.0002		
						18.81.8.230.0000		
						18.81.8.230.0002		
						18.81.8.230.0002		
						18.91.8.230.0040		
						18.91.8.230.0042		
						18.A1.8.230.0000		
						18.5D.8.230.0000		

Technical data

Insulation

Dielectric strength between open contacts	V AC	1000 (except for type 18.91 TRIAC output)
Between supply and contact	V AC	1500 (types 18.21...0300, 18.31...03xx, 18.41, 18.51...0300, 18.51...B300, 18.81)

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...1000 MHz)		EN 61000-4-3	10 V/m (18.71, 18.81)
Radiated electromagnetic field (80...2000 MHz)		EN 61000-4-3	3 V/m
Radiated electromagnetic field (1.4...6 GHz)		EN 61000-4-3	3 V/m (18.71, 18.81)
Fast transients (burst 5/50 ns, 5 and 100 kHz)	on supply terminals	EN 61000-4-4	1 kV 2 kV (18.71, 18.81)
	common mode	EN 61000-4-5	4 kV (18.01, 18.11, 18.21, 18.31, 18.41, 18.51, 18.A1, 18.5D) 2 kV (18.91)
Voltage pulses on supply terminals (surge 1.2/50 µs)	differential mode	EN 61000-4-5	4 kV 2.5 kV (18.01, 18.11) 1 kV (18.91) 3 kV (18.71, 18.81)
Radiofrequency common mode voltage (0.15...80 MHz)	on supply terminals	EN 61000-4-6	15 V
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
	100% U _N , 60% U _N , 30% U _N	EN 61000-4-11	10 cycles (18.71, 18.81)
Radiofrequency conducted emissions	(0.15...30)MHz	EN 55014	class B
Radiated emissions	(30...1000)MHz	EN 55014	class B

Terminals		18.01, 18.11, 18.21, 18.31, 18.91		18.71, 18.81		18.41, 18.51, 18.A1, 18.5D	
Type		 Box clamp		 Box clamp		Push-in (see pag. 20)	
Screw torque	Nm	0.5		0.35		—	
Max. wire size		solid cable	stranded cable	solid cable	stranded cable	solid cable	stranded cable
	mm ²	1 x 4 / 2 x 2.5	1 x 4 / 2 x 2.5	1 x 2.5 / 2 x 1	1 x 2.5 / 2 x 1	2.5	2.5
	AWG	1 x 12 / 2 x 14	1 x 12 / 2 x 14	1 x 14 / 2 x 16	1 x 14 / 2 x 16	14	14
Wire strip length	mm	9	9	6	6	8	8

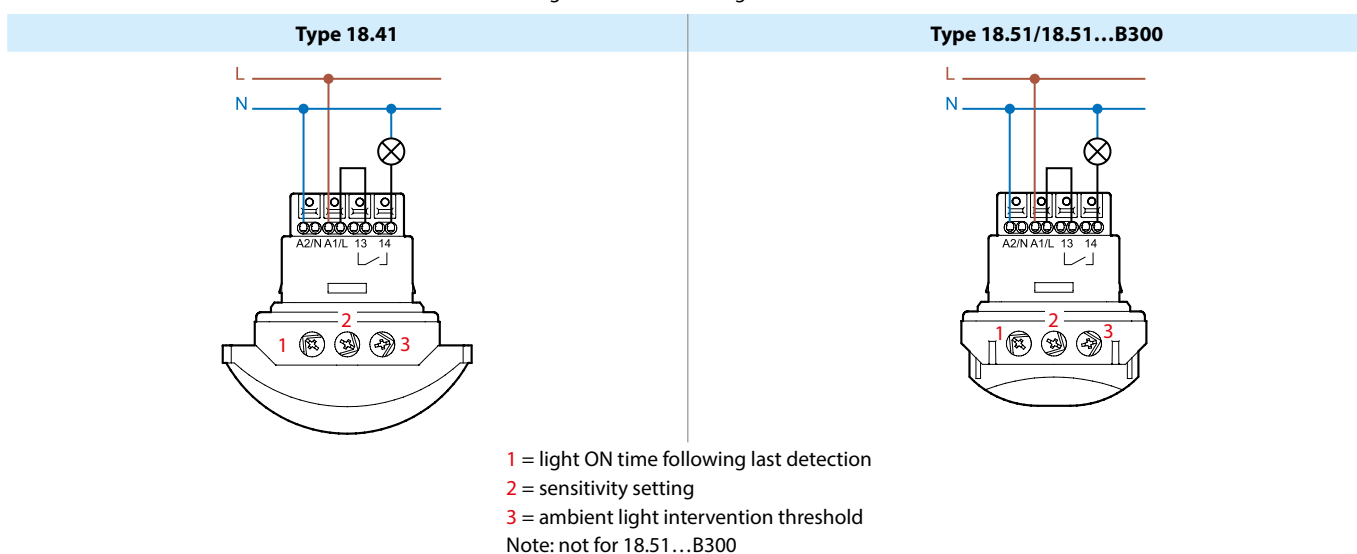
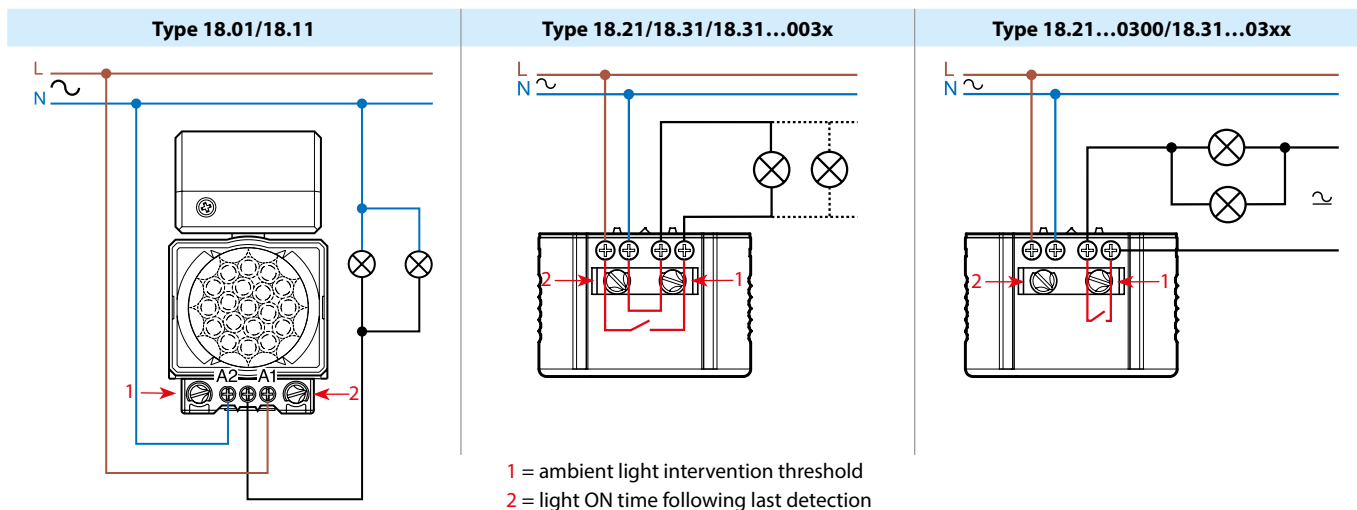
Other data

Power lost to the environment	without output current	W	0.3
	with rated output current	W	1.4
Cable grip (type 18.11)	Ø mm	(8.9...12)	

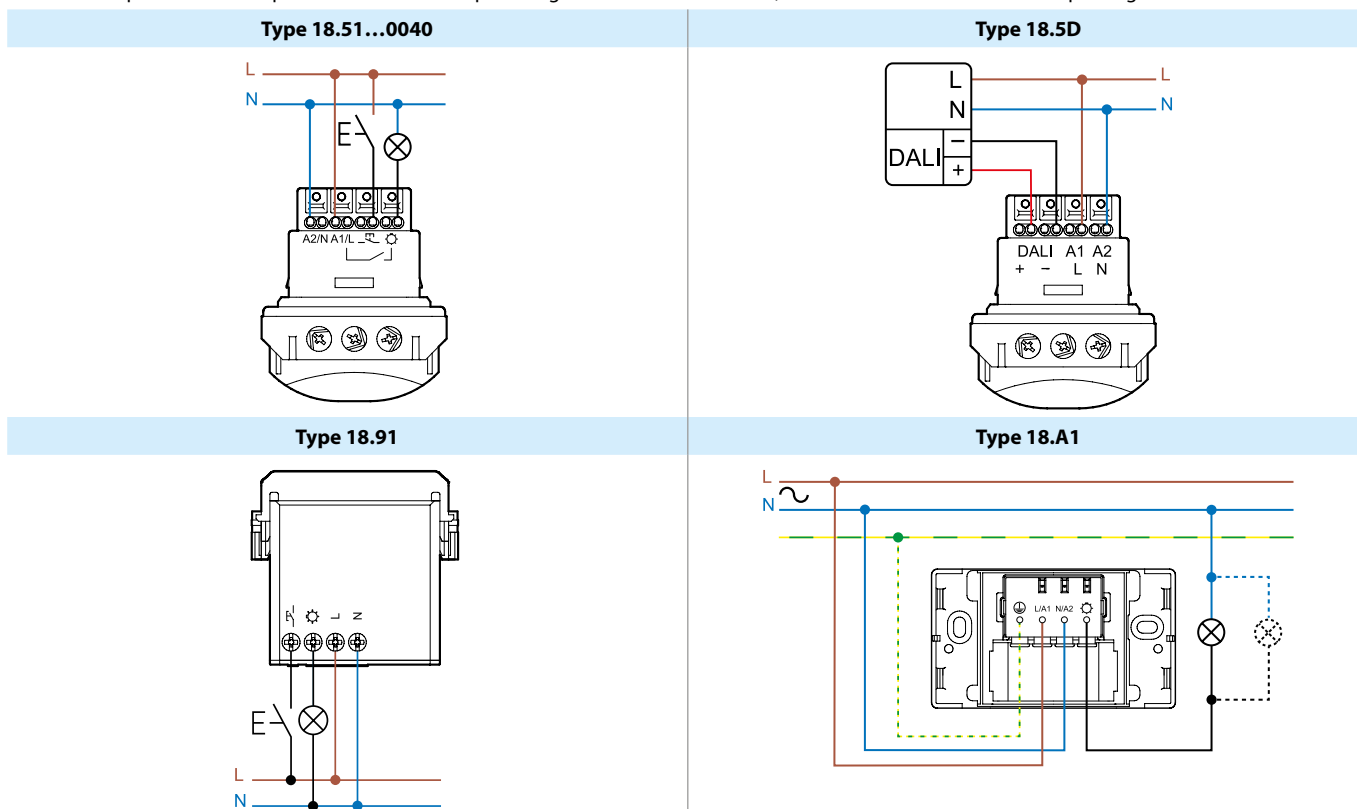
Following the initial power-on, and power-on following a power interruption, the detector makes a hardware-software initialisation for approximately 15 seconds only for 18.71 and 18.81.

The behaviour of the output during this period can vary depending on the product type, and in some cases on the state of the detector before the power interruption and on the lighting level.

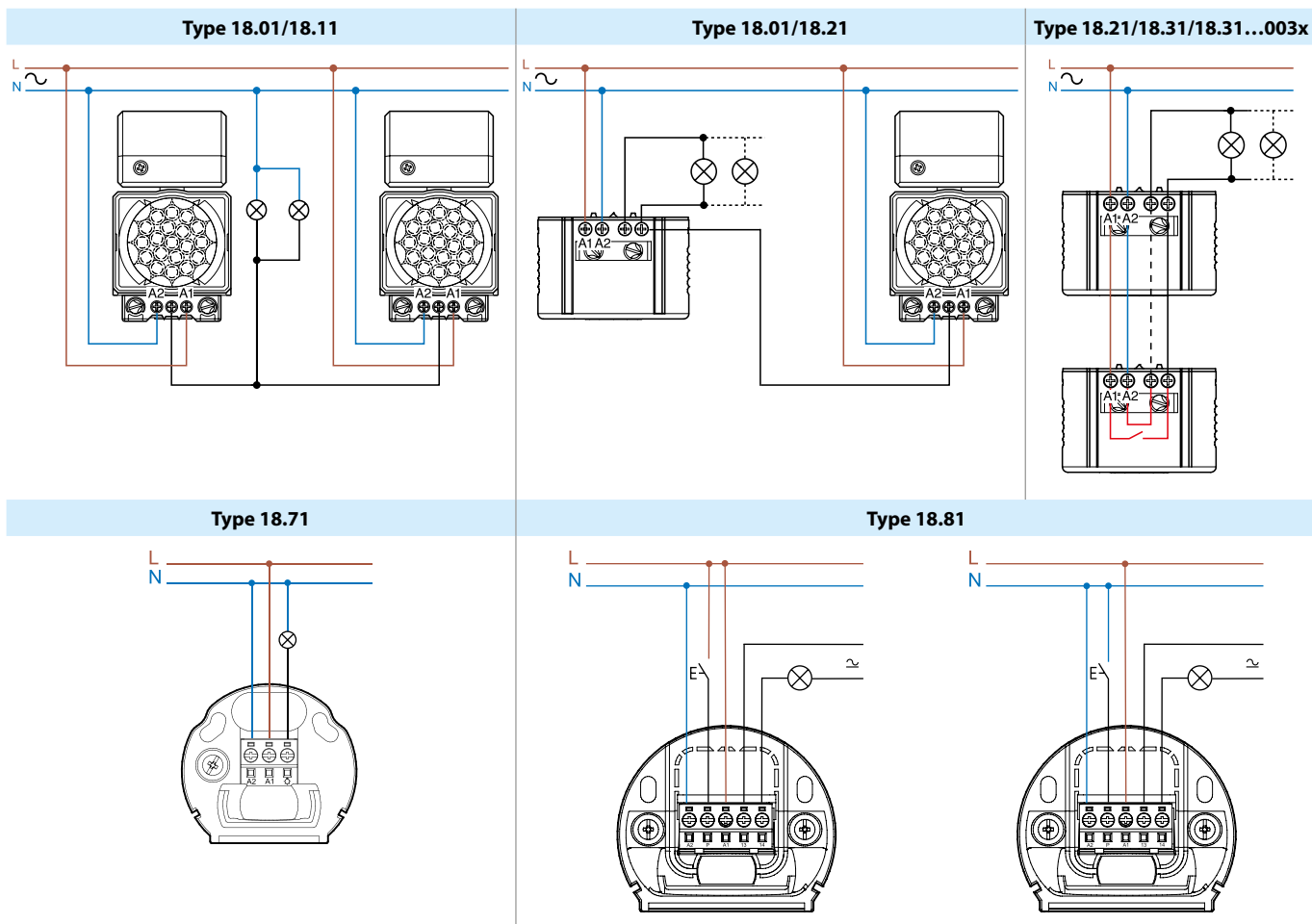
Wiring diagram



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.



Wiring diagram



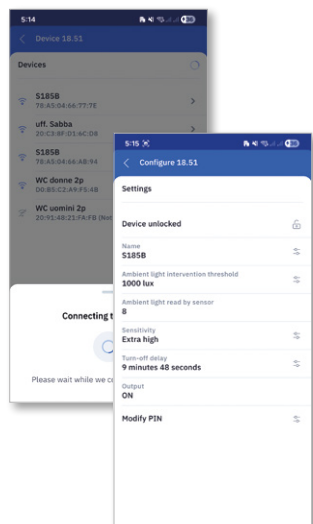
Note: Observe the polarity indicated for Phase and Neutral

Type 18.51-B300 - Bluetooth

Through the use of Bluetooth LE (Low Energy) technology programming the detector's operating characteristics can be easily and conveniently done using an Android or iOS smartphone.

After installing the 18.51, simply download the Free **App Finder Toolbox** from Google and Apple's official stores and set all the required parameters.

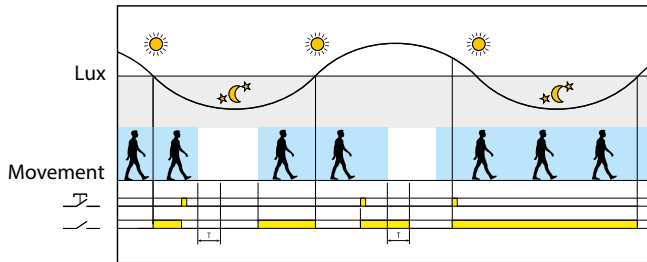
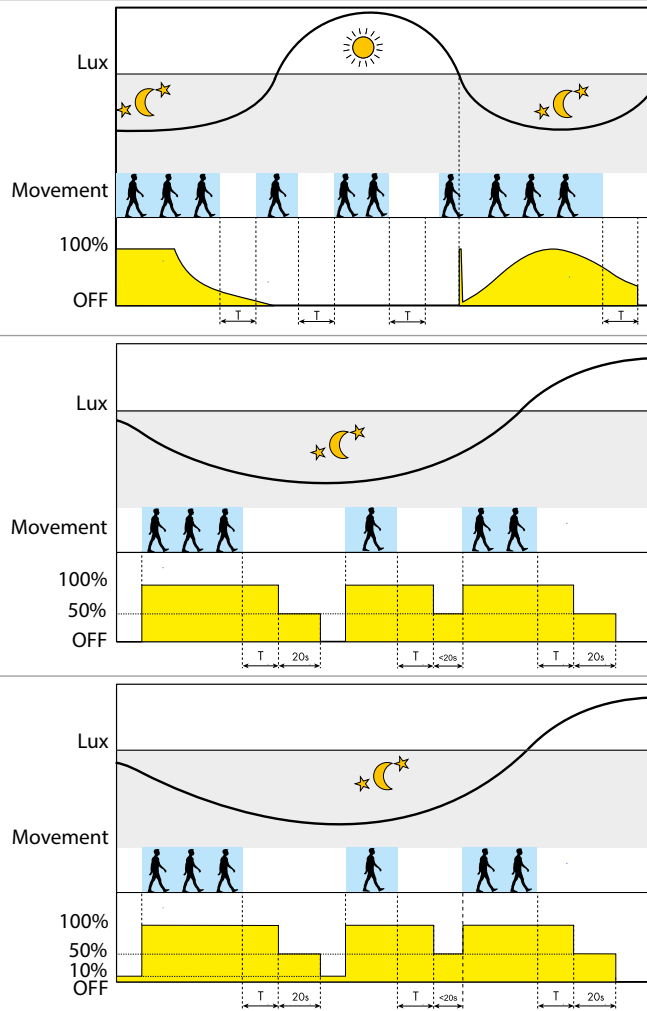
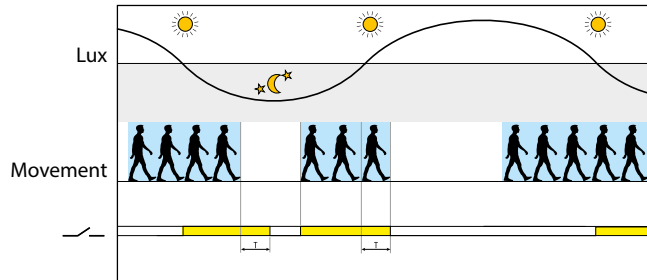
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Finder Toolbox

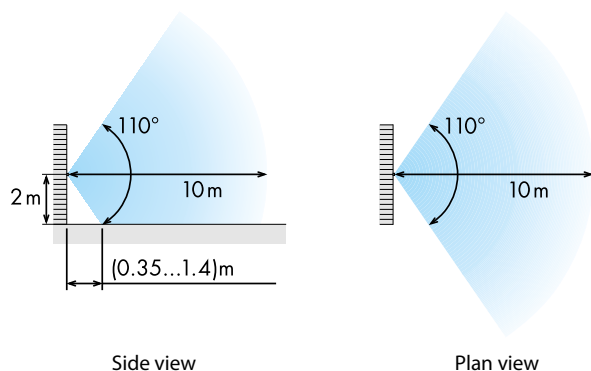
Detectors can be named and uniquely identified within a building. The ambient light level threshold can be adjusted between 4 lux and 1000 lux, the Light On delay time can be set from 12 seconds to 25 minutes, and the movement detector set to one of three sensitivity levels. When Bluetooth connection is made to a detector a red LED signals the correct pairing and that all the set parameters have been transferred. The detector then responds with two feedback values - brightness as read by the light sensor in the detector and the contact status, if closed (On) or open (Off). For security, the detectors can be locked by a selector switch and a 4-digit PIN - preventing parameter changes by unauthorized persons.

Functions

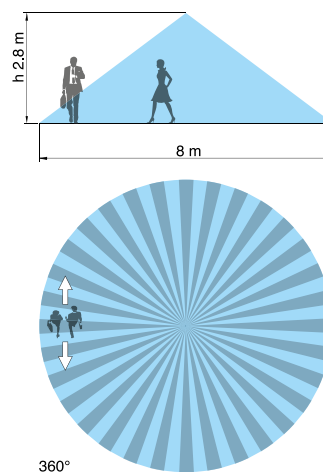
Type	Functions
18.51...0040 18.81 18.91	 Push-button function (18.51...0040) A control pulse on the push-button inverts the status of the output relay, until the timing after the last movement detected is elapsed. Dynamic Light Compensation (18.51...0040, 18.81 and 18.91) By incorporating Finder's Patented "light feedback compensation" principle, the 18.51...0040, 18.81 and 18.91 are able to calculate the artificial light contributed by the lamps controlled by the output relay. In effect, this means the 18.51...0040 is able to continuously monitor the natural ambient light level, even when the output is On. As a consequence, whenever the natural light level exceeds the threshold setting the output is forced Off. This can significantly minimise the time the lighting is On, particularly where there is a high level of traffic - and cost savings can be considerable. This is an advance over other types of movement detectors, which are unable to identify the natural ambient light level when the output is On and so can only turn Off after the time delay that follows the last detected movement. In busy areas this may mean that the movement detector is being continuously re-triggered and maintained in the On state, even though the natural light level has long risen above the threshold.
18.5D	 Comfort - Daylight-linked constant light level control Adjusts to maintain a constant brightness level considering the detection of movement and the level of daylight - increasing or decreasing the power of the artificial light as appropriate. Suitable for small offices, classrooms or workplaces. This allows considerable energy saving while maintaining a comfortable level of illumination. Simplicity - ON/OFF control with early warning Works as a simple movement detector, activating the lamps at 100% power. But provides an early warning of the next shutdown with a power reduction to 50% for 20 seconds. Avoids a sudden total shutdown of lighting. Courtesy - ON/OFF control with early warning + courtesy light level If the brightness level is lower than the set value, artificial light is maintained at 10% power, guaranteeing a minimum level of illumination at all times. When movement is detected, the power of the lamps is raised to 100%. There is an early warning of any reduction from the 100% power level by a reduction to 50% for 20 seconds. Suitable for common areas, lobbies, corridors, elevator zones.
18.01 18.11 18.21 18.31 18.41 18.51...0300 18.51...B000 18.71 18.A1	 Detection of movement Detected movement closes, or keeps closed, the output contact. Operating the push-button closes, or keeps closed, the output contact - for the set time T.

Sensing area

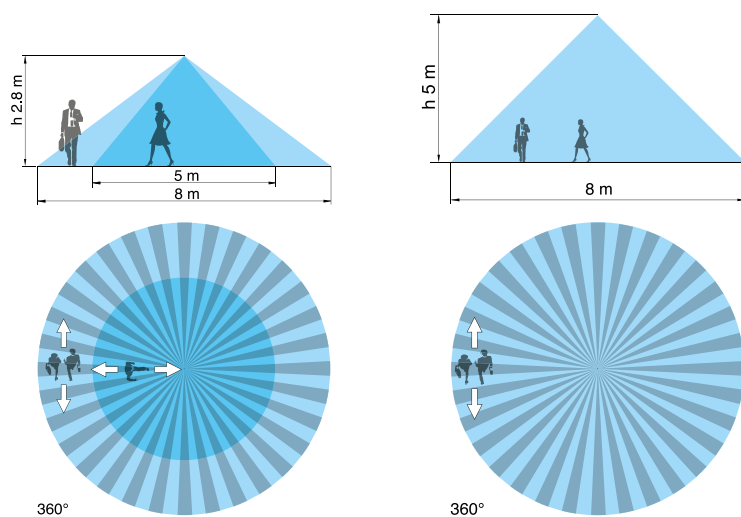
18.01, 18.11, 18.71, 18.81, 18.A1 - Wall mounting



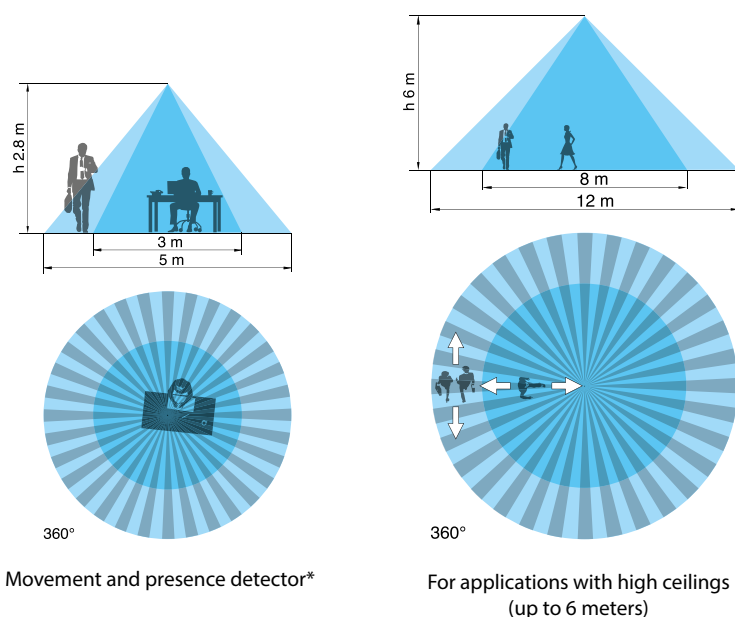
18.01, 18.11, 18.71, 18.81, 18.A1 - Ceiling mounting



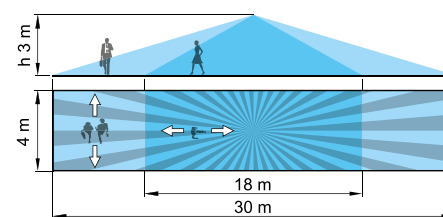
18.21, 18.31 - Ceiling mounting



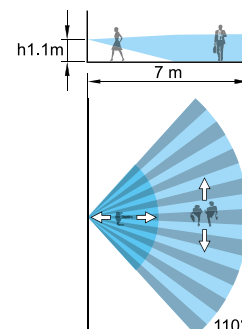
18.31...003x - High ceilings installations



18.41



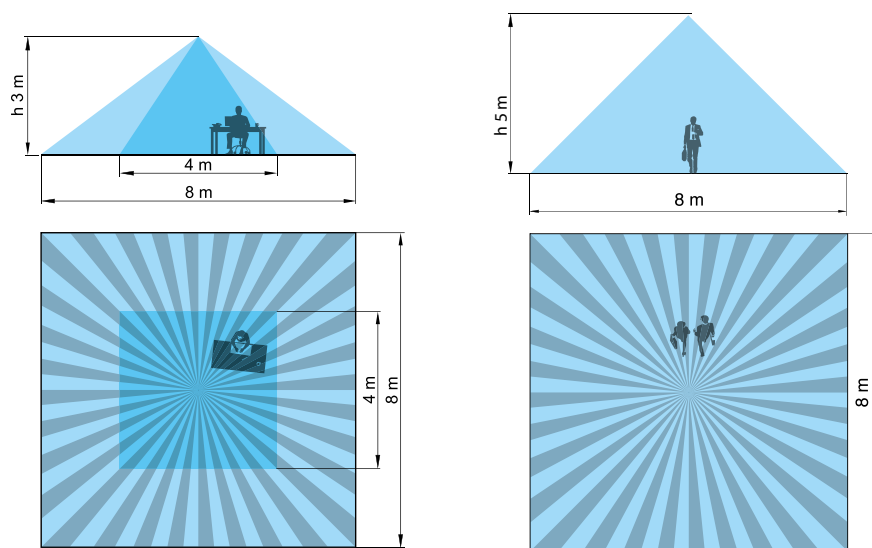
18.91



* NOTE: Motion and presence detector refers to the device's ability to detect micro-movements of approximately 30 cm. This allows for the detection of people in offices, schools, bathrooms, and other environments. It is not recommended for detecting people who are sleeping or completely motionless.

Sensing area

18.51/18.51...B300/18.5D

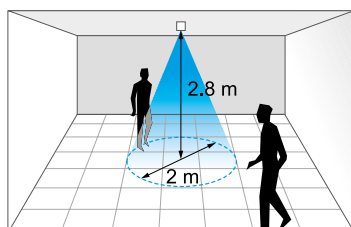


Movement and presence detector*

* NOTE: Motion and presence detector refers to the device's ability to detect micro-movements of approximately 30 cm. This allows for the detection of people in offices, schools, bathrooms, and other environments. It is not recommended for detecting people who are sleeping or completely motionless.

Accessories

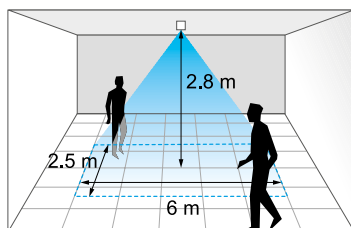
18.21/18.31



Beam limiter (supplied with the types 18.21/31)

At an installation height of 2.8 meters the area of survey will reduce at: diameter 2 meters

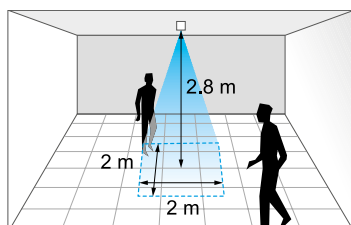
18.41



Beam limiter (supplied with the type 18.41)

At an installation height of 2.8 meters the area of survey will reduce at: 2.5 x 6 meters

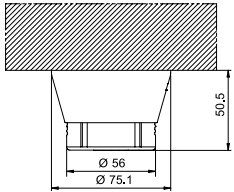
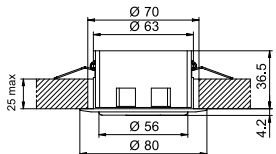
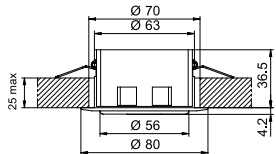
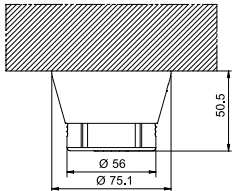
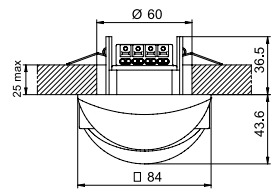
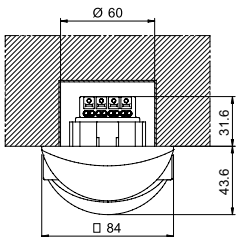
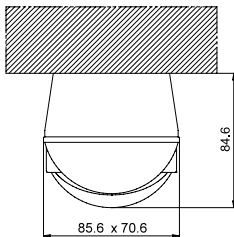
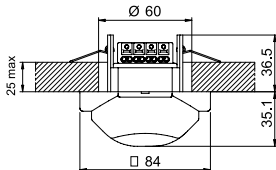
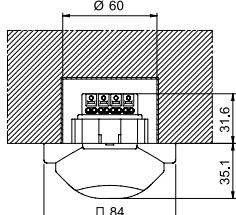
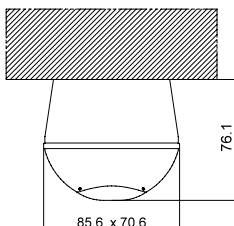
18.51



Beam limiter (supplied with the type 18.51)

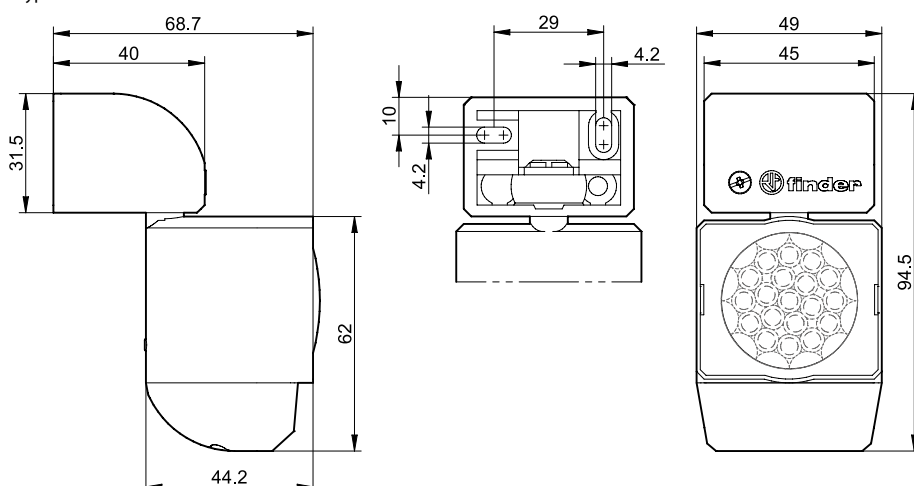
At an installation height of 2.8 meters the area of survey will reduce at: 2 x 2 meters

Outline drawings

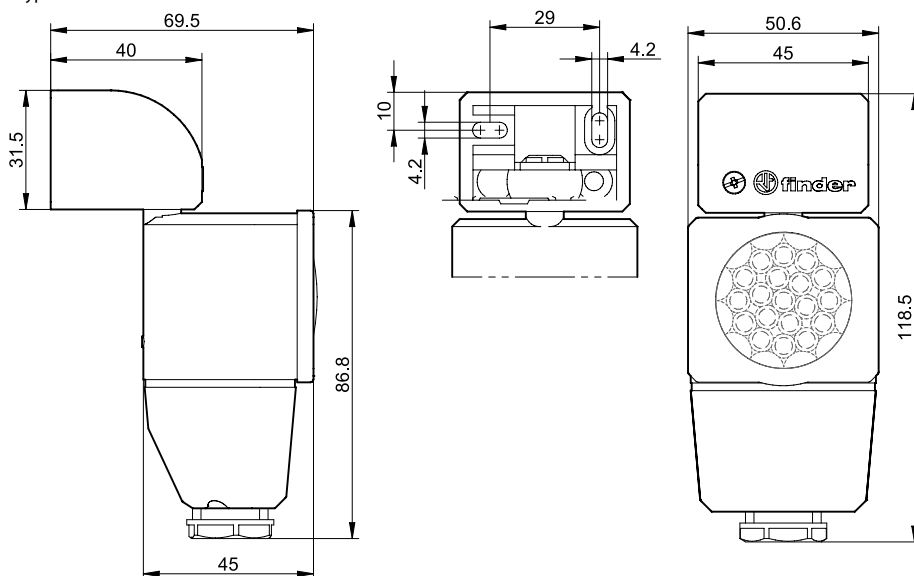
Type	Suspended ceiling mounting	Recess mounting	Surface mounting
18.21			
18.31			
18.31...003x			
18.41			
18.51 18.5D 18.51...B300			

Outline drawings

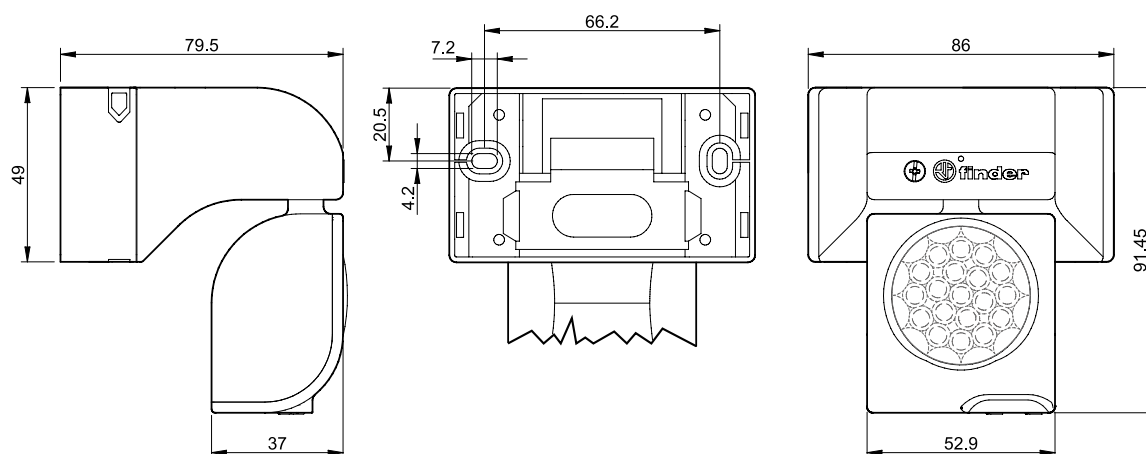
Type 18.01



Type 18.11

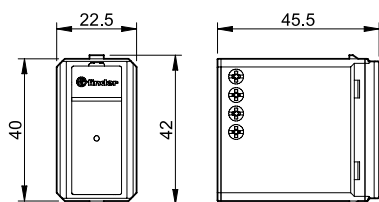


Type 18.A1

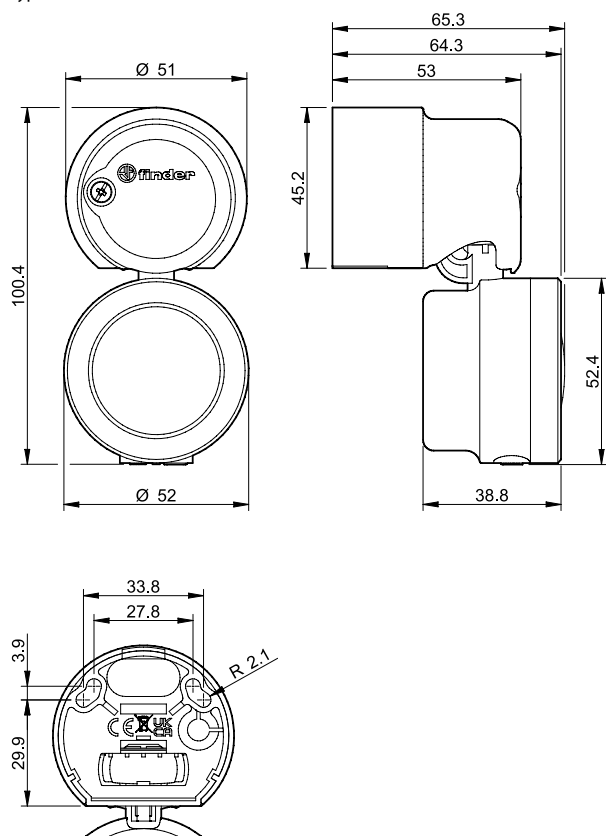


Outline drawings

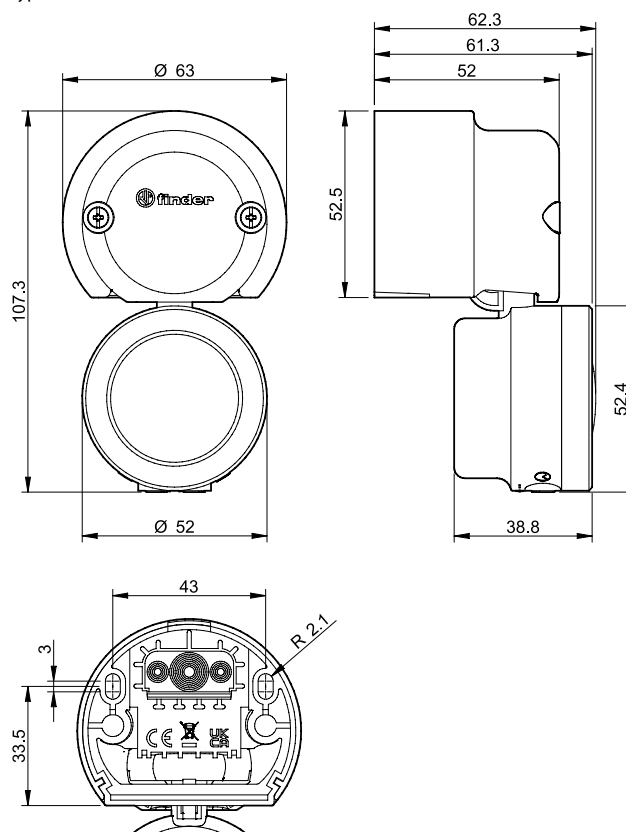
Type 18.91



Type 18.71

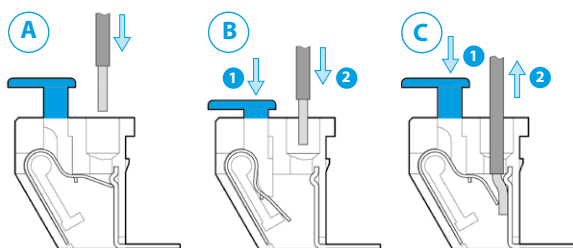


Type 18.81



Push-in terminals for 18.41, 18.51, 18.5D and 18.A1

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.