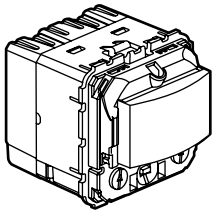
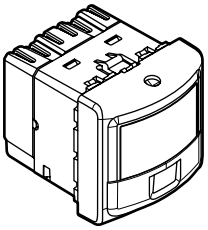
Detector switch - PIR

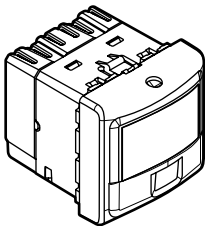
Catalogue number(s): 0 670 96 - 0 784 53 - 0 792 53 - 5 740 31 - 5 740 81 - 6 651 20 - 6 652 20



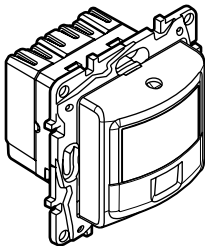
0 670 96



0 784 53
0 792 53



5 740 31
5 740 81



6 651 20
6 652 20

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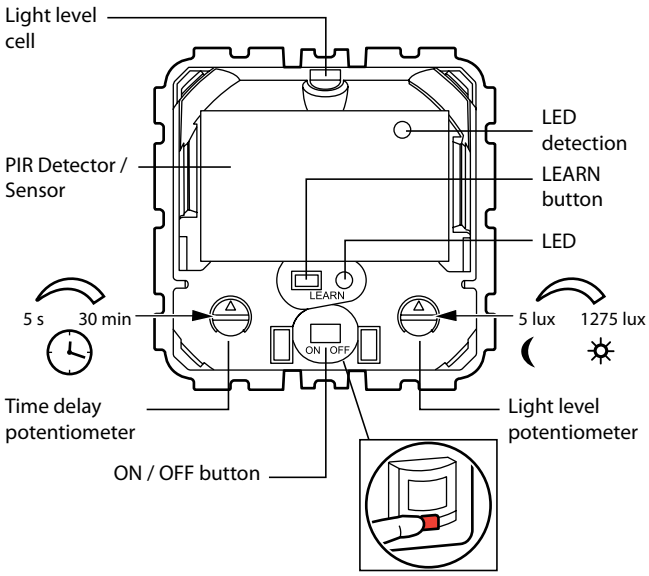
1. USE

This device allows a light source to be controlled automatically through the detection of any presence in the surveillance zone using local controls.
Presence sensor with 180° detection angle.
Detection type: infrared (PIR)
Assembly type: wall flush mounted

2. TECHNICAL FEATURES

Voltage: 100 - 240 V~
Frequency: 50/60 Hz
No-load power consumption: 0.2 W
Output via normally open contact connected to the phase
Wiring: 2 x 2.5 mm²
Flush-mounting box: 40 mm min.
Weight: 60 g
Impact resistance: IK04
Penetration by solid and liquid matter: - Single IP20 mechanism
- IP41 product installed with plate and rocker plate
Usage temperature: - 5°C to + 45°C
Storage temperature: - 20°C to + 70°C
Number of terminals: 3
Type of terminals: screw
Terminal capacity: 2 x 2.5 mm²
Stripping length: 8 mm

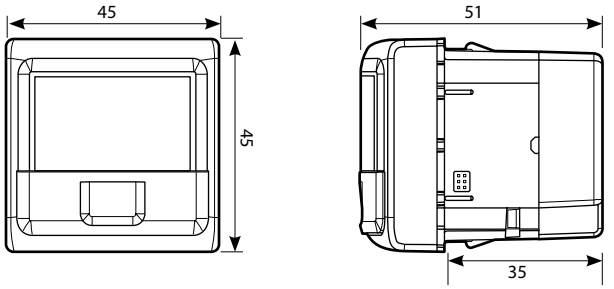
2. TECHNICAL CHARACTERISTICS (continued)



		①		②		③	
230 V	Max.	400 W	1.7 A	400 VA	1.7 A	400 VA	1.7 A
	Min.	40 W	0.2 A	40 VA	0.2 A	40 VA	0.2 A
110 V	Max.	200 W	1.7 A	200 VA	1.7 A	200 VA	1.7 A
	Min.	20 W	0.2 A	20 VA	0.2 A	20 VA	0.2 A

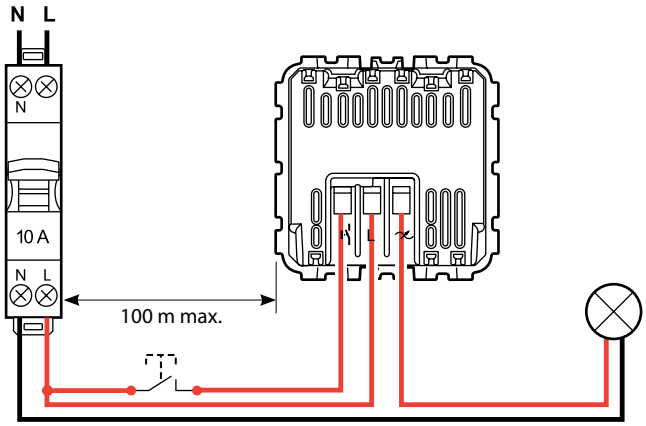
1 - Incandescent and halogen bulb
2 - ELV halogen bulb with separate electronic ballast
3 - ELV halogen bulb with separate ferromagnetic ballast

3. DIMENSIONS



4. CONNECTION

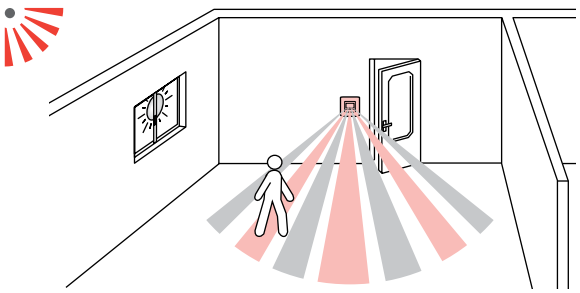
■ 4.1 Wiring with auxiliary control:

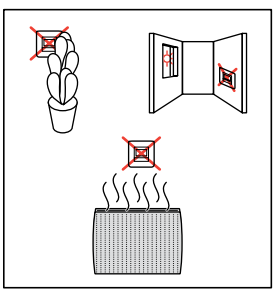


No parallel connection possible to control a load.

5. INSTALLATION

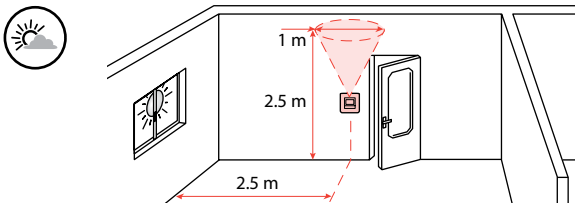
■ 5.1 Sensor positioning

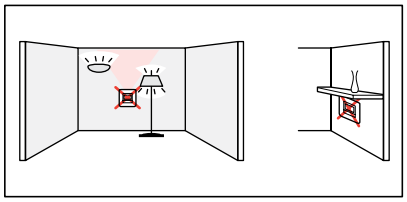




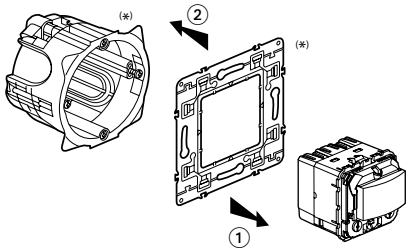
5. INSTALLATION (continued)

■ 5.2 Recommended light exposure





■ 5.3 Positioning



(*) Not supplied

6. OPERATION

Manual ON/Automatic OFF mode
Pressing the auxiliary control allows the load to be switched on or off manually. If the control is not pressed, the sensor will cut off the load at the end of the time delay or when the light level threshold has been reached.

Auto ON/OFF mode:
The load will be switched on and off automatically.

Option: It is possible to control the sensor by infrared remote control using: Cat. Nos. 0 882 00/01/20/31/32/33.

7. SETTINGS

7.1 Detection parameters

Sensor parameter		Default value	Modifiable parameters	Configuration tools	
				0 882 30	0 882 35
Time delay		15 mins	3, 5, 10, 15, 20 min	–	✓
			5s - 59 min 59s	✓	–
Sensitivity		PIR (very high)	Low, medium, high, very high	✓	✓
Modes	**Auto on/Auto off**	Inactive	Activate/ Deactivate	✓	✓
	Walk-through mode	Inactive	Activate/ Deactivate	✓	✓
	Manual on/Auto off	Active	Activate/ Deactivate	✓	✓
Detection system	**Initial**	PIR	Not modifiable	✓	–
	Maintain	PIR	Not modifiable	✓	–
	Restart	PIR	PIR, Deactivate	✓	–
Alarm		Inactive	Activate/ Deactivate	✓	–

Time delay: Length of time the load is on after detection.

Sensitivity: Detection range setting.

Modes:

Auto on/Auto off mode:
Comes on automatically:
- At the detection of a presence if there is an insufficient natural level of light.

Turns off automatically:
- If no presence is detected and at the end of the time delay set.
- Or if the natural light level is sufficient (regulation activated)

Another detection causes automatic switch-on if there is insufficient light.

Walk-through mode:
- If no presence is detected in the 20 seconds following an initial detection, the product will cut off the load after 3 minutes.
- If another presence is detected in the 3 minutes following initial detection, the device will cut off the load at the end of the set time delay.

Manual on/Auto off mode:
Comes on via a manual switch, automatic switch off:
- Where no presence is detected and at the end of the time delay set.

After switch-off, any new detection within a 30 second period triggers an automatic switch-on. The Restart function must be activated.
After 30 seconds the device is switched on via a manual switch.

Detection system:

Initial detection: The load is switched on as soon as the first detection occurs if the natural light level is below the light level threshold.

Maintain: The load remains active if another presence is detected.

Restart: In manual mode. After switch-off, any new detection within a 30 second period triggers an automatic switch-on.
After 30 seconds the device must be switched on manually.

Alarm: an audible signal is emitted before switch-off. (1 minute before, then 30 seconds, then 10 seconds).

7. SETTINGS (continued)

7.2 Light parameters

Sensor parameters		Default value	Modifiable parameters	Configuration tools	
				0 882 30	0 882 35
Light level threshold		300 lux	20, 100, 300, 500, 1000 lux	–	✓
			5 - 1275 lux	✓	–
Advanced mode	**Calibration**	–	0 - 99995 lux	✓	–
	Regulation	Active	Activate/ Deactivate	✓	–
	Light contribution	Auto	Auto - 1275 lux	✓	–

Light level threshold: Value at which the load comes on if the natural light level is less than the setting.

Caution:
The device becomes a motion detector at 1275 lux.

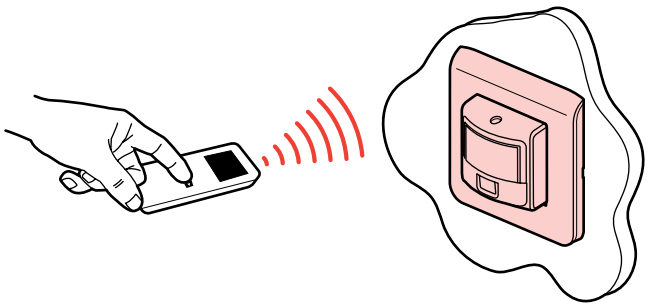
Advanced mode:

Calibration: The surrounding light level measured with a luxmeter must then be transmitted to the sensor (see data sheet Cat. No. 0 882 30)

Regulation: Automatic switch-off of the load 10 minutes after the light level threshold is exceeded with an additional safety threshold (to avoid lights switching off at the wrong moment).

Light contribution: Quantity of additional lux provided by the load being switched on.
When the light contribution parameter is set to "Auto" (value 0) on the configuration tool Cat. No. 0 882 30 the sensor automatically calculates the light contribution.

7.3 Modifying the parameters using the configuration tools



- 0 882 35: Simplified configuration tool
- 0 882 30: Advanced configuration tool

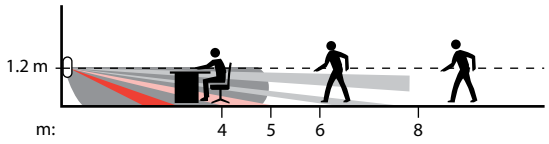
When the sensor receives an IR command using the configuration tool, it emits a beep acknowledging the modification.
For more information about setting parameters, refer to the data sheet for the configuration tool Cat. No. 0 882 30.

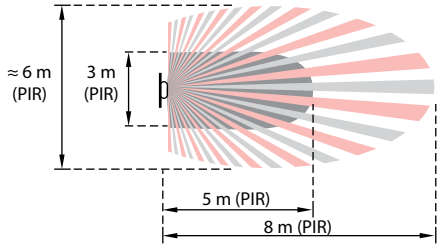
Range: 1 m.
The potentiometers are active by default. Using a configuration tool deactivates all the potentiometers.
Reset the product to reactivate them.

- Restore to factory settings:
1st press: Short press on LEARN: the LED flashes slowly.
2nd press: Press and hold down LEARN for 10 seconds until the LED flashes quickly.

8. PERFORMANCE

Height





8.1 PIR detection (Walk-through)

Sensitivity	Ø (m)
Low (25%)	7
Medium (50%)	8
High (75%)	10
Very high (100%)	12

8.2 PIR detection (Presence)

Sensitivity	Ø (m)
Low (25%)	1
Medium (50%)	2
High (75%)	4
Very high (100%)	5

9. CARE

Keep the lens clean.
Clean the surface with a cloth.
Do not use acetone, tar-removing cleaning agents or trichloroethylene.
Resistant to the following products: - Hexane (EN 60669-1)
- Methylated spirit
- Soapy water
- Diluted ammonia
- Bleach diluted to 10%
- Window-cleaning products.

Caution:
Always test before using other special cleaning products.

10. STANDARDS

Directive: CE

Installation standards: NFC 15-100

Product standards: IEC 60669-2-1

Environmental standards:
- European Directive 2002/96/EC:
  WEEE (Waste Electrical and Electronic Equipment).
- European Directive 2002/95/EC:
  RoHS (Restriction of Hazardous Substances).
- Decrees and/or regulations: ERP (public buildings)
  ERT (workplace buildings)
  IGH (high-rise buildings)

11. TROUBLESHOOTING

PROBLEM	CAUSES	SOLUTIONS
Lighting stays on when there is no-one present	Sources of interference can cause false tripping, such as: air current, vibrations, radiators	1- Reduce the sensitivity level 2- If the interference continues: using the configuration tool, go into the Detection system parameters, select Maintain and then choose PIR 3- If the interference still continues, move the sensor away from sources of interference
Lighting does not switch off during the day when there is an adequate level of natural light	Regulation function not active Light level threshold set too high Light contribution is too high	Activate the regulation function Reduce the light level threshold Check that the sensor is positioned correctly in relation to the window Decrease the power of the luminaires
Lighting switches off when there are people present and the natural light level is not adequate (darkness)	Time delay too short Detection sensitivity too low Light level threshold too low	Increase the time delay 10 to 1 minutes is recommended for work areas Increase the sensitivity Move the sensor closer to the work area Increase the threshold