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067099

$078454-079258$


5740 47/97

## 1. USE

Switch sensor with neutral, infrared detection (PIR).
Allows a light source to be controlled automatically through the detection of any presence in the surveillance zone.
Presence sensor with $120^{\circ}$ detection angle.
For flush-mounting, back box to be min. 40 mm deep.
To be equipped with plate.

## 2. RANGE

| Description | Colour | Cat. Nos |
| :--- | :---: | :---: |
| Switch sensor 2000 W Céliane <br> 3-wire with neutral | - | 067099 |
| Switch sensor 2000 W Mosaic <br> 3-wire with neutral | White <br> Alu | 078454 |
| 079258 |  |  |
| Switch sensor 2000 W Arteor <br> 3-wire with neutral | White <br> Magnesium | 574047 <br> 574097 |

## 3. DIMENSIONS (mm)



| A | B | C | D |
| :---: | :---: | :---: | :---: |
| 45 | 45 | 51 | 16 |

## 4. PRESENTATION



## 5. CONNECTION

Number of terminals: 4
Type of terminals: automatic
Terminal capacity: $2 \times 2.5 \mathrm{~mm}^{2}$
Stripping length: 8 mm
Screwdriver: flat 4 mm
Compatible with flexible or rigid cables

- 5.1 Wiring with auxiliary control



## 5. CONNECTION (continued)

- 5.2 Wiring for several loads connected in parallel

- 5.3 Wiring for a single load connected in parallel



## 6. TECHNICAL CHARACTERISTICS

## - 6.1 Mechanical characteristics

Protection against impact: IK 04
Protection against solid bodies and liquids:

> - IP 20 mechanism alone
> - IP 40 mounted product with rocker and plate

## - 6.2 Material characteristics

Colour: - White RAL 9003

- Aluminium
- Magnesium

Material: - Plate: ABS

- Halogen free
- UV resistant

Self-extinguishing:
$850^{\circ} \mathrm{C} / 30 \mathrm{~s}$ for insulating parts holding live parts in place. $650^{\circ} \mathrm{C} / 30 \mathrm{~s}$ for other parts made of insulating materials

- 6.3 Electrical characteristics

Voltage: 100-240 V~
Frequency: $50-60 \mathrm{~Hz}$
Standby consumption: 0.2 W
Output via normally open contact connected to the phase Power:

|  | (1) |  | (2) |  | (3) |  | (4) |  | (5) |  | (6) |  | (7) |  | (8) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | LED |  |  |
|  | --'- |  |  |  | T\\| |  | $\triangle \otimes$ |  | D\\| $\\|$ |  | $\triangle \otimes$ |  | $\triangle \otimes$ |  | $\triangle \otimes$ |  | ] |
| $230 \mathrm{~V} \sim$ | 2000 W | 8.5 A | 1000 VA | 4.3 A | 1000 VA | 4.3 A | 10x (2x36W) | 4.3 | $10 \times(2 \times 36 \mathrm{~W})$ | 4.3 A | 500 VA | 2.1 A | 500 VA | 2.1 A | 1 max. $\leq 2 \mathrm{~A}$ |
| $110 \mathrm{~V} \sim$ | 1000 W |  | 500 VA |  | 500 VA |  | $5 \times(2 \times 36 \mathrm{~W})$ |  | $5 \times(2 \times 36 \mathrm{~W})$ |  | 250 VA |  | 250 VA |  |  |

1 - Halogen bulb
2 - ELV halogen bulb with separate ferromagnetic ballast
3 - ELV halogen bulb with separate electronic ballast
4 - Fluorescent tube with separate ferromagnetic ballast

5-ELV fluorescent tube with separate electronic ballast 6 -Compact fluorescent bulb with built-in electronic ballast
7 - LED bulb with built-in electronic ballast
8 - Contactor

Important: Take account of transformer losses when calculating power. Transformers must be loaded at more than $60 \%$ of their power. Note: Possibility to mix any type of load on the same circuit.

## - 6.4 Climatic characteristics

Use temperature: $-5^{\circ} \mathrm{C}$ to $+35^{\circ} \mathrm{C}$
Storage temperature: $-10^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$

## 7．OPERATION

－7．1 More than one sensor and more than one load 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． 0882 00／01／20／31／32／33．
Synchronising the products is done in two stage：
－one long press（＞1s）all the sensors（ S ）switch to the ON state
－one short press all the sensors（S）switch to the OFF state

| －$\bigotimes^{\prime}$－ L 1 on L2 OFF Ln OFF | D1 ON D2 OFF Dn OFF |  | Qli off <br> Ql2 off <br> $\otimes$ Ln off | 回D1 OFF D2 OFF Dn OFF |
| :---: | :---: | :---: | :---: | :---: |
| －$\bigotimes_{1}^{\prime}=1$ on L2 OFF Ln OFF | 回 D1 ON <br> 回D2 OFF Dn OFF | $\begin{gathered} \text { BP } \\ <1 \mathrm{~s} \\ 5 \end{gathered}$ |  | $\begin{aligned} & \text { 回 } \mathrm{D} 1 \mathrm{ON} \\ & \text { 回 } \mathrm{D} 2 \mathrm{ON} \\ & \text { 回 } \mathrm{Dn} \text { ON } \end{aligned}$ |
| $\bigotimes L 1$ off L2 OFF Ln OFF | 回D1 OFF <br> 回D2 OFF Dn of | $\begin{gathered} \mathrm{BP} \\ <1 \mathrm{~s} \end{gathered}$ | 我 | $\begin{aligned} & \text { 回 } \mathrm{D} 1 \mathrm{ON} \\ & \text { 回 } \mathrm{D} 2 \mathrm{ON} \\ & \text { 回 } \mathrm{Dn} \text { ON } \end{aligned}$ |
| $\begin{aligned} & \text { - L1 on } \\ & \text { - L2 on } \\ & \text { en on } \end{aligned}$ | 回 D1 ON <br> 回 D2 ON Dn ON | $\begin{gathered} \mathrm{BP} \\ <1 \mathrm{~s} \end{gathered}$ | Q 11 off L2 OfF Ln OFF | 圆D1 OFF <br> 回D2 OFF Dn OFF |
| －$\otimes^{\prime}=1$ on L2 OFF Ln OFF | D1 ON D2 OFF Dn OFF | $\begin{gathered} \mathrm{BP} \\ <1 \mathrm{~s} \\ 5 \end{gathered}$ | Qli off | 回D1 OFF <br> 回 D 2 ON <br> 回 Dn ON |


| 7. OPERATION (continued) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ■ 7.3 Detection parameters |  |  |  |  |  |
| Sensor parameters |  | Default value | Modifiable parameters | Configuration tools |  |
|  |  | 088230 |  | 088235 |
| Time delay |  |  | 15 mn | $\begin{aligned} & 3,5,10,15,20 \\ & \min \end{aligned}$ | - | $\checkmark$ |
|  |  | 5s-59 min 59s |  | $\checkmark$ | - |
| Sensi | vity | PIR (very high) | Low, medium, high, very high | $\checkmark$ | $\checkmark$ |
| $\begin{aligned} & \text { y } \\ & \frac{0}{0} \\ & \Sigma \end{aligned}$ | Auto on/ Auto off | Active | Activate/ Deactivater | $\checkmark$ | $\checkmark$ |
|  | Walkthrough mode | Inactivr | Activate/ Deactivate | $\checkmark$ | $\checkmark$ |
|  | Manual on/ Auto off | Inactir | Activate/ <br> Deactivate | $\checkmark$ | $\checkmark$ |
| $\begin{aligned} & \stackrel{0}{U} \\ & \text { E } \\ & \mathbb{U} \\ & \text { U } \\ & 0 \end{aligned}$ | Initial | PIR | Not modifiable | $\checkmark$ | - |
|  | Maintain | PIR | Not modifiable | $\checkmark$ | - |
|  | Restart | PIR | PIR, <br> Deactivater | $\checkmark$ | - |
| Alarm |  | Inactive | Activate/ Deactivate | $\checkmark$ | - |

- Time delay: Length of time the load is on after detection.
(III) Sensitivity: Detection range setting


## Modes:

(K) 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.


## iv) 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.
Restard: 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. OPERATION (continued)

## - 7.4 Light parameters

| Sensor parameters |  | Default value | Modifiable parameters | Configuration tools |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 088230 |  | 088235 |
| Light level threshold |  |  | 300 lux | $\begin{aligned} & 20,100,300, \\ & 500,1000 \text { lux } \end{aligned}$ | - | $\checkmark$ |
|  |  | 5-1275 lux |  | $\checkmark$ | - |
|  | Calibration | - | 0-99995 lux | $\checkmark$ | - |
|  | Regulation | Actif | Activer/ Désactiver | $\checkmark$ | - |
|  | Light contribution | Auto | Auto-1275 lux | $\checkmark$ | - |

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

Caution: At 1275 lux, the device becomes a motion sensor.

## Advanced mode:

Calibration: The ambient light level measured with a luxmeter must then be transmitted to the sensor (see data sheet Cat. No. 0882 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. 088230 the sensor automatically calculates the light contribution.

- 7.5 Modifying the parameters using the configuration tools

- 0882 35: Simplified configuration tool
- 0882 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. 088230.
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:

$1^{\text {st }}$ press: Short press on LEARN: the LED flashes slowly.
$2^{\text {nd }}$ press: Press and hold down LEARN for 10 seconds until the LED flashes quickly.

## 8. PERFORMANCE



- 8.1 PIR detection (walk-through)

| Sensitivity | $\emptyset(\mathrm{m})$ |
| :--- | :---: |
| Low (25\%) | 7 |
| Medium (50\%) | 8 |
| High (75\%) | 10 |
| Very high (100\%) | 12 |

- 8.2 PIR detection (presence)

| Sensitivity | $\boldsymbol{\varnothing}(\mathrm{m})$ |
| :--- | :---: |
| Low (25\%) | 1 |
| Medium (50\%) | 2 |
| High (75\%) | 4 |
| Very high (100\%) | 5 |

## 9. CLEANING

Clean the surface with a cloth.
Do not use acetone, tar-removing cleaning agents or trichloroethylene. Resistance to the following cleaning substances:
Hexane (EN 60669-1), Methylated spirit, Soapy water, Diluted ammonia, Diluted pure bleach $10 \%$, Glass cleaning product.

Caution: An initial test is required for the use of other special maintenance products.

## 10. STANDARDS AND APPROVALS

Compliance with standards of installation and manufacturing. See e.catalogue.

## 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 <br> 2- If the interference continues: using the configuration tool, go into the Detection system parameters, select Maintain and then choose PIR <br> 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 <br> Reduce the light level threshold <br> Check that the sensor is positioned correctly in relation to the window <br> 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 |

