



LUCE AMICA infrared detector for light switching

INTRODUCTION

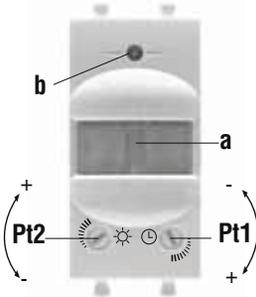
LUCE AMICA 44.068/3F is a volumetric passive infrared sensor detecting people's presence; it is provided with a triac output, suitable for lamp switching-on or load actuation. The detecting component is made up of a pyroelectric sensor and a Fresnel lens. The control device is equipped with a twilight sensor which makes the output operate only when the room light drops below the preset threshold. After a detection, the output is activated for an adjustable time by means of a special timer.

The front panel is provided with:

- a) a Fresnel lens
- b) a twilight sensor transparent window

Pt1 Light switching-on time adjustment

Pt2 twilight threshold adjustment
It is installed onto 1 System 44 module. From the mechanical point of view, it is compatible with all System 44 components and can also be installed onto flush-mounting round boxes.



TECHNICAL DATA

- Power supply: 230 Vac
- Allowed variation: 198 to 253 Vac
- Mains frequency: 50 - 60 Hz.
- Max current demand: 12 mA at 230 Vac
- Reference temperature and relative humidity: 25°C – RH 65%
- Room temperature range: 0°C to +40°C
- Max relative humidity: 90% at 35°C
- Loads to be controlled with alternate current:
 - Resistive load ($\cos\phi = 1$): 1A max at 230 Vac
 - Inductive load: 25÷200VA
 - Filament lamps: 25÷200W
 - Fluorescent lamps: 25÷200W (power factor corrected in parallel).

Note: not advisable for energy conservation lamps control.

- Load triggering time: 20 s to 5 min (20% tolerance)
- Twilight threshold adjustment: 10 lx to 7.000 lx.
- Overall dimensions: nr. 1 System 44 module
- Protection degree: IP41

STANDARD REFERENCES

CEI EN 60669-2-1 "Circuit breakers for domestic fixed installations and similar uses"

COVERING DIAGRAM (fig. 1)

- a) Plan view b) Side view

OPERATING DESCRIPTION

Initial test

On connecting the device to the power supply, it is affected by the following conditions:

- **Lamp test:** output 0.5s OFF and then 30s ON
- **Covering test:** Under this condition the detector can activate the load independently from the room light level. At every detection the load is controlled for 4 s. (the thresholds preset from Pt1 and Pt2 are not determinant). The test duration is fixed and corresponds to 180s.approx.

Operation

The sensor is enabled to switch lights on when detecting any movement at a temperature different from the one of the scanned area only if the room light is lower than the one set by the special potentiometer (Pt2).

Once the load has been turned on, it remains in such a condition for the time preset by the special potentiometer (Pt1). If anybody walks in front of the detector during the load activation time, the timing in progress is automatically restored by starting from zero, without interrupting the load on restoring.

NOTE: to avoid any possible irregular operation due to the short distance between the detector and the controlled lamp, we recommend to proceed as follows:

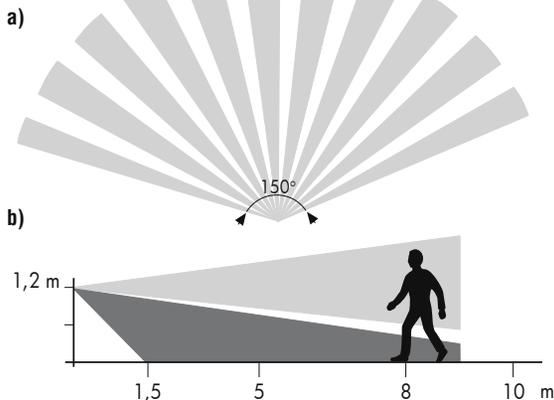
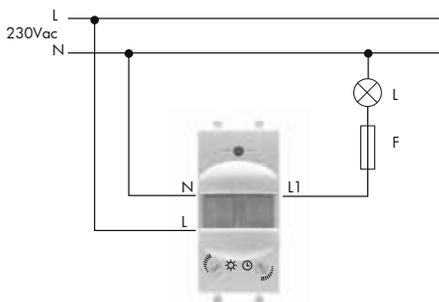
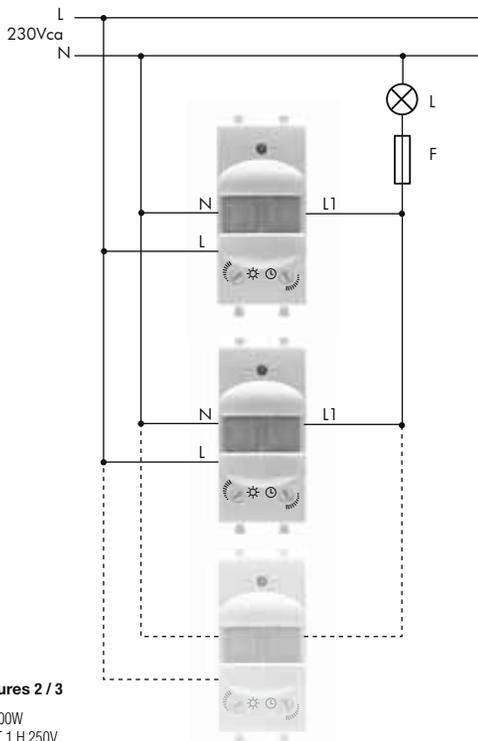
- for 2 seconds from the lamp switching-off (OFF) the detector is "masked" (does not operate);
- likewise, during the ON period the twilight threshold (b) is masked.

Do not install the device next to heat (convectors) and light sources.

We recommend likewise not to install the device near components subject to heat (light dimmers, relays, etc..).

APPLICATION DIAGRAMS

- Installation to control the load from one detecting spot (Fig. 2)
- Installation to control the load from two or more detecting spots (Fig. 3).

Figure 1**Figure 2****Figure 3****Legend figures 2 / 3**

L: load 25x200W
F: fuse type T 1 H 250V

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IMPORTANT NOTES:

- Products should be sold in their original packaging. Otherwise, the retailer and/or installer is obliged to follow, as well as to communicate to the user, the instructions for use which are supplied with the product and/or are published on the website www.ave.it as well as in the current product catalog.

- AVE products are installation products

- Products must be installed by trained professionals in compliance with the installation regulations

- Once the product is unpacked, make sure that the appliance is undamaged. Do not use the appliance if there is any doubt, but contact a qualified technician

- Even before unpacking, the appliance should be handled with care and stored in a dry place at temperatures between -5°C and $+40^{\circ}\text{C}$

- Before carrying out any maintenance on the appliance, cut off the mains power

- Special attention should be paid to the preparation of the cable terminals to be inserted into the appliance terminals so as to maintain sufficient isolation distance between contacts

- When tightening the terminal screws, special care should be taken to avoid overheating which could start a fire or damage the cables.

- The product must be used in dry, dust-free areas

- Suitable products must be used in any other conditions

- There is a risk of electric shock or malfunction of the device if not handled properly.

- Install products and accessories according to the prescriptions in the catalogue and the instructions sheet and in compliance with specific standards and rules

- Warranty certificate for a specific product, which specifies the warranty period and conditions in accordance with local regulations, is issued by the seller at the moment of sale of product

The manufacturer's warranty: The 5 year warranty applies only to damaged or malfunctioning products caused by manufacturer's negligence, taking into account the rights and obligations prescribed by law (art. 1490, 1512 C.C., DL 24/2002, Directive 1999/44/CE, art. 1519 C.C.). The defect must be notified within 2 month from the date it was discovered. Five years are intended from the date of delivery of the product to the final customer.

