# 230 V. LIGHT DETECTOR

# I-104

## TECHNICAL CHARACTERISTICS

Supply voltage. ..... 230 V. C.A.
Average consumption. ..... 1 W.
Maximum permissible load to the relay. ..... 5 A.
Maximum power applied to the relay. ..... 1000 W.
Minimum level of detection. ..... 25 Lux.
Maximum level of detection. ..... 130 Lux.
Led indicator work. ..... Yes.
Measures. ..... ... 85 x 55 x 35 mm.

The light detector I-104 through the sensor that is included, activate the output when it receives light.
It feeds at 230 V. C.A. and allows adjustment of the sensitivity of work by a potentiometer inserted in the circuit. The output relay is done, admitting any load or equipment which do not exceed 5 A. consumer maximum.
Includes LED indicator work to extract the potentiometer connector outside and terminals.

## OPERATION

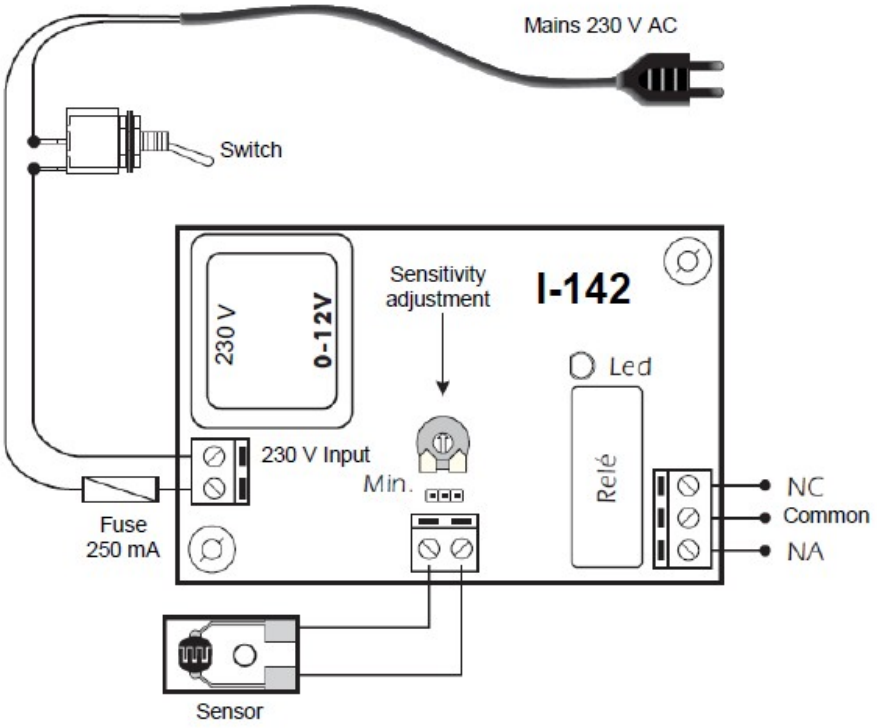
**POWERING THE UNIT.** The feeds I-104 to 230 V. C.A. Observe the wiring map.
Using a suitable plug and a network cable, connect the input terminal of 230 V. Install a fuse and a switch as indicated in paragraph miring map. Both are necessary for the proper protection module for your own safety, as reflected in the CE standard. Finally make sure you have made correct assembly.
Before activating the switch supplying the power, do the rest of the circuit connections described forward. Note that in different part of the module 230 V. CA, so we recommend extreme care and attention during assembly.

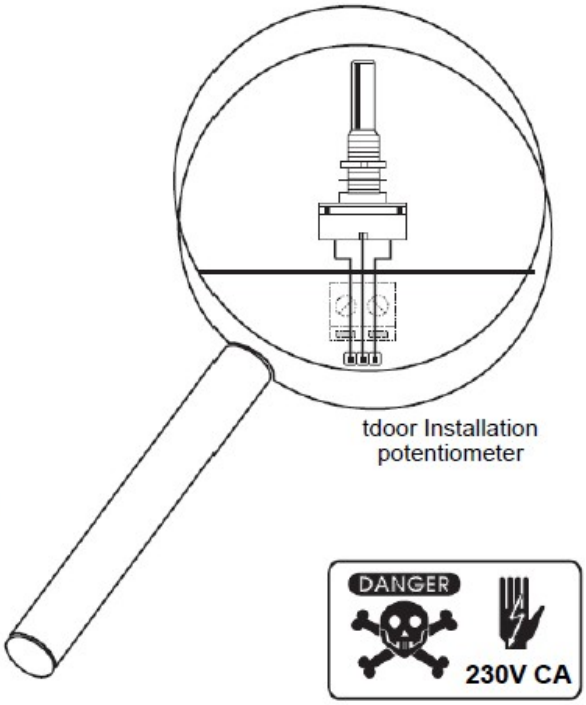
**OPERATION.** Noting the wiring map, install the terminal sensor suitable for this. If cable length used exceeds 30 cm., you must use shielded cable, keep the distance is much greater this.
Once all connections are turned on. Immediately after which you can see how the sensor, if acted upon, to fail to perceive light will activate the module, LED lighting and activating output automatically.
The I-104 provides the ability to adjust the sensitivity of the module with respect to light which must be activated. To act on the sensitivity adjustment potentiometer as desired. Guiding the cursor to the minimum, the circuit loses sensitive and need more dark in order to activate. If you target the cursor to the maximum gain module sensitivity and need less darkness to activate.
If you need to place the I-104 outside, outdoors, should place the module inside a waterproof case where sensor, while remaining on the outside is also essential that he should be protected from rain or excessive moisture.
The module also provides for the operation in reverse to explain, for it desoldering indicated resistance R5 4K7 circuit and value and solder in the place provided for the R6

**OUTPUT CONNECTION. LOAD.** The output of the I-104 is controlled by a relay, which allows the admission of any load that does not exceed 5 A. maximum consumption. The relay has three output terminals. The Normally open at rest (NA), the normally closed at rest (NC), and common. The operation of this mechanism is identical to a switch whose two terminals are the NA and the common, if you want the output to be activated when the sensor stops receiving light, or between NC and common for the inverse function. In the drawing Connection Output shows the typical wiring for a device operated at 12 V. C.C. and the operating at 220 V. C.A. Installation is performed between the common and NA, where the device or load to be controlled while the sensor is connected not perceive light.

**LOCATION EXTERNAL POTENTIOMETER.** If you are removing or changing the potentioneter inserted in the module by an outer, first unsolder which is in the circuit. After thast, as shown in the diagram, connect the cable between the external diameter and the length or jumper marked J1. The potentiometers must be of type 22K linear and the cable must not exceed 30 cm

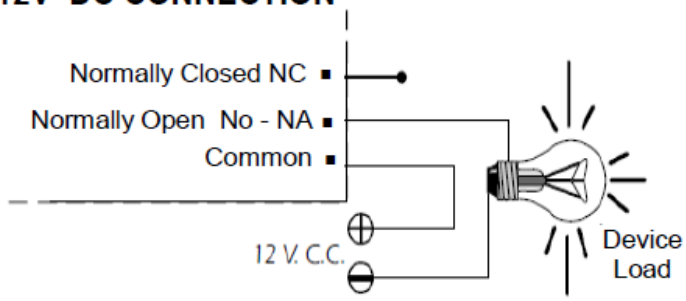
## GENERAL WIRING MAP.



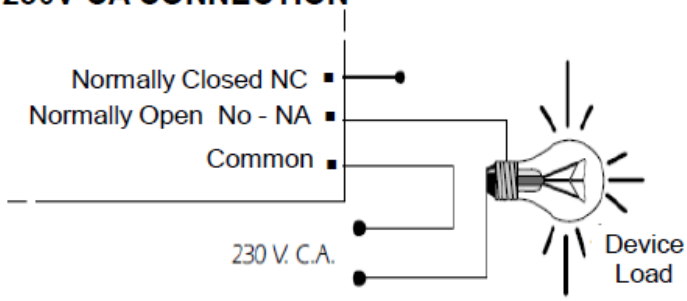




## OUTPUT CONNECTION

### 12V DC CONNECTION




### 230V CA CONNECTION




**CONSIDERATIONS ON THE OUTPUT.** During the operating mode and according to its load, may fluctuate or malfunction departure. If this happens, install a circuit spark between the two relay contacts used in connection as shown in the drawing.

### 230 V CA CONNECTION