



# cebek<sup>®</sup>

## 2 to 45 minutes UNIVERSAL TIMER I-102



### TECHNICAL CHARACTERISTICS

Voltage. ....	230 V. A.C.
Minimum Consumption. ....	30 mA.
Maximum Consumption. ....	85 mA.
Sizes. ....	84 x 55 x 30 mm.
Minimum Timing. ....	2 minutes.
Maximum Timing. ....	45 minutes.
Maximum admissible Load. ....	5A

The I-102 module is a standard timer. It will maintain activated the output till the end of the timing. The adjustment is done thanks to the potentiometer inserted in the PCB. It could be activated by supplying or closing its contacts thanks to a push button. It includes indicator LED and Jumper to extract the potentiometer at the exterior

### POWER SUPPLY and OUTPUT CONNECTION

**POWER SUPPLY.** The module I-102 had to be supplied by 230 VAC. Using an adequate plug and a cable for mains connect this last one to the input terminal 230 VAC. Install a fuse and a switch as it is indicated in General Wiring Map (see hereafter). Both are necessary to protect the module and for your own security, as it is indicated in EEC regulations. Then, verify that you have correctly connected the module.

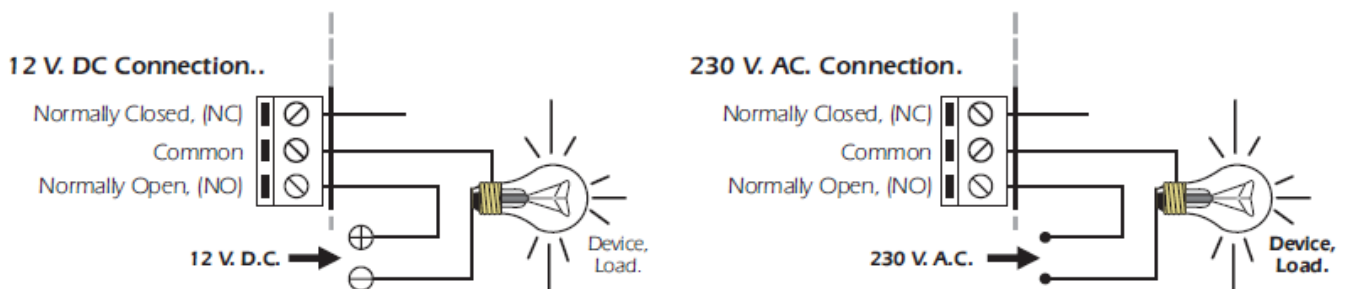
Before to connect the module to the mains inserting voltage, please do the rest of connections specified hereafter. Do not forget that in several part of the module there is voltage (230 VAC), for this reason we suggest you to be careful.

**Note.** Connections indicated as 230 VAC in the wiring map have to be connected to 115 VAC. in Americans countries. Cebek's Modules and/or transformers will be supplied with corresponding modifications for their connection in these countries.

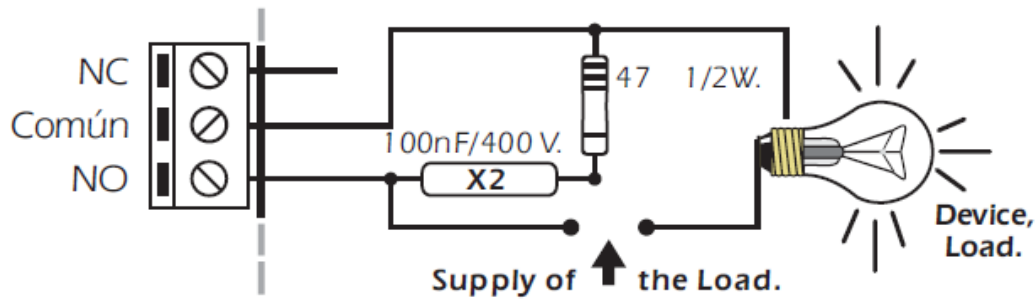
**OUTPUT CONNECTION. LOAD.** The circuit output is controlled by a relay, and accepts any device up to 5 A. The relay is not a component supplying voltage but its function is limited to accept or deny the voltage passage like a standard switch. For this reason, you have to supply the load through this component.

The relay has three output terminals: The normally open quiescent (NO), the normally closed quiescent (NC) and the common. Install it between the Common and the NO in accordance with the schedule Pic. 1. For the inverse function you have to place the load between the NC and Common

Pic. 1. 12 V. DC and 230 V. AC. connections of the module's output.



**INFORMATION ABOUT THE OUTPUT.** During the operating mode and according to its load, it could happen a fluctuation or an incorrect working of the output. In such case, you have to install an anti-spark circuit (100 nF/400V Type X2 Capacitor and 47 . ½ W resistor) between both contacts of the used relay, as it is indicated on the drawing.



## INSTALLATION and OPERATING.

**INSTALLATION.** Connect to the corresponding input, indicated in the "General Wiring Map" paragraph, a quality push button. The used cable length for this connection has to be inferior than 20 cm, otherwise, the module doesn't operate correctly. If you use shielded cable, connecting its braid to the terminal with the ground symbol of the push button input, you could increase the distance up to a maximum of 70 cm.

For longer length, we suggest you a installation connecting cable on the output and not on push button input.

**INSTALLATION OF THE EXTERNAL POTENTIOMETER.** If you wish to remove the potentiometer inserted on the PCB and install an external potentiometer, you have to firstly desold the resistor from the circuit. Then, and as it is indicated on the General Wiring Map, you have to connect new potentiometer's terminals (4M7) to the Jp2 jumper.

**OPERATING MODE.** The timing adjustment is done adjusting the potentiometer inserted on the PCB. At beginning you have to place the potentiometer at the minimum, after you could adjust it according to your wished time.

Once the time selected, the module could be activated according to two different modes: Activation by push button or Supplying the module. To activate the module thanks to the push button, you have firstly to install a quality push button between indicated terminals. See the General Wiring Map. Each time you activate it, and if the previous timing is completely finish, the module will be activated, lighting the led and exiting the relay during the selected time.

To activate the circuit each time you supply the module, without using the push button, you have to connect both terminals of the Jp1 jumper. Then, each time you supply the module, the timing will be automatically activated.

## GENERAL WIRING MAP

