



## UNIVERSAL TIMER FROM 1 Sec. to 3 Min.

The I-33 circuit allow to delay the output connexion. Then, the output will be activated during the operating time. It could be activated supplying voltage and/or closing its contacts using a push button. It includes a protection against polarity inversion, an indicator operating led, connector to withdraw the exterior potentiometer and terminals to connect it.

#### TECHNICAL CHARACTERISTICS.

| Voltage Minimum Consumption Maximum Consumption Minimum Time Maximum Time Maximum Load At The Relay Operating Indicator Led Protection Against Inversion Polarity. | 12 V. D.C.       |
|--|------------------|
| Minimum Consumption  | 15 mA.           |
| Maximum Consumption  | 70 mA.           |
| Minimum Time   | 1 Sec.           |
| Maximum Time   | 3 Min.           |
| Maximum Load At The Relay  | 5 A.             |
| Operating Indicator Led  | Yes.             |
| Protection Against Inversion Polarity  | Yes.             |
| Sizes  | 76 x 44 x 30 mm. |

#### OPERATING.

**POWER SUPPLY.** The I-33 circuit had to be supplied by a 12 VDC power supply well filtred. Do not use suppliers or rectifiers because they allow interferences disturbing teh circuit operating.

Then, we recommended you the FE-2 power supply which has been developed to perfectly answer to the circuit needs (or 12V batterie for mobile application). Connect the positive of the power supply to the positive terminal indicated in the wiring map, then connect also the negative of the power supply to the negative terminal indicated in the circuit. **Verify** that the assembly has been correctly done.

**TIMERING.** Following indications described in the General Wiring Map, install a push button at the indicated terminal. If the required cable for your assembly is superior than 20 cm, you had to use a shielded cable. Pushin the button, the module will be activated, delaying the operating. Then, operating and stop timering will start until their determinated times. Operating indicator led will light to indicate that output is activated.

Both times, operating and delay are independent and could be adjusted thanks to potentiometers inserted in the P.C.B. Make an operating test placing potentiometrs at the minimum, then you could adjust them according to your needs.

**OUTPUT. CONNECTION OF THE LOAD.** The output Module (I-33) is controlled by a relay, allowing any load until 5 A. as maximum consumption. The relay has 3 output terminals the normally open at quiescent (NA), the mormally closed at quiescent (NC) and the common. The operating of this mechanism is the same as a switch with two (2) terminals NA and common, if you wish that the output will be activated during the timer, or between the NC and the common to obtain the reverse operating.

In the Output connection paragraph, you could apreciate the typical connection for a devices operating at 12 VDC and to operate at 230 V. A.C.

The installation is between the Common and NA, where the device or load that you wish to control will be activated during the operating time.

To obtain the inverse operating, substitute in the connection the NA by the NC.

**START SUPPLYING VOLTAGE.** Module could be started closing its contacts using a push button (as deliver from our factory) or supplying voltage. To activated the I-33 module supplying voltage you had to make a short-circuit (join together) two pins of the piece or jumper J3, indicated in General Wiring Map and Circuit. When this operation has been done, each time youconnect the module's power supply it will be activated, without pushingthe button.

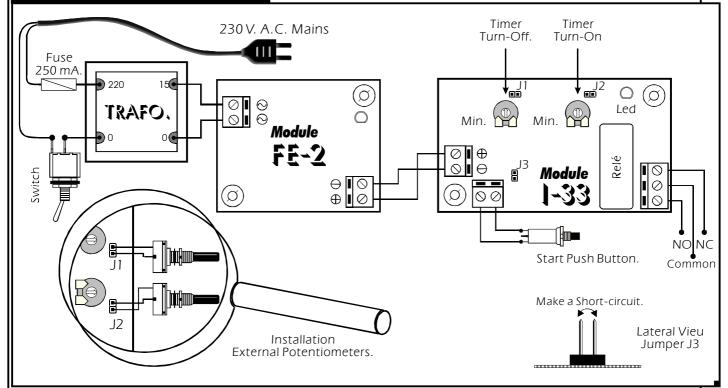
**EXTERIOR INSTALLATION OF THE POTENTIOMETER.** If you wish to withdraw or substitute the potentiometer inserted into the P.C.B by an exterior one, firstly you had to supress the already soldered potentiometer. Then, and as it is indicated in the drawing, connect the cable between the element or jumper indicated as "J1" and "J2" and exterior potentiometers. Both potentiometers have to be lineal and offering 2M2.



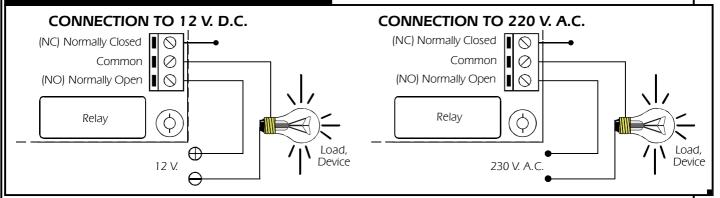
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## GENERAL WIRING MAP.



# OUTPUT. LOAD CONNECTION.



### TECHNICAL SUPPORT AND INFORMATION.

For any questions or more information:

**By Fax.** +34.93.432.29.95

By Mail: C/ Quetzal, 17-21, (08014) BARCELONA - spain.

By E-Mail: sat@cebek.com

**Keep you invoice.** For any repairing could you send this with module. Else, the module will lost the warranty.

All the module's CEBEK have **3 years of total warranty** in the cnical repairing, and spares from the date of buy.

WARRANTY

SEARS



CEBEK is trade make of FADISEL S.L. more than 300 module's are available in stock for any purpose **request our CATALOGUE**, or visit our Web.