



The I-59 is a 8 outputs extension module to increase the capacity a sequential system based on the I-57 module. It includes output for communication with successive extension as well as indicators Leads. It can be adapted on our RAIL DIN ref. C-7590.

TECHNICAL CHARACTERISTICS

Table with 2 columns: Parameter and Value. Includes Voltage (12 V. D.C.), Minimum/imum Consumption (5 mA / 450 mA), Maximum admissible load by Rel. (5 A), Protection against Inversion of Polarity (P.I.P.) (Yes), and Dimensions (107 x 132.5 x 30 mm).

INSTALLATION.

POWER SUPPLY. The I-59 circuit had to be supplied by a 12 VDC power supply. Then, we recommended you the FE-123 power supply which has been developed to perfectly answer to the circuit needs or a 12 V batteries for mobile applications.

Use the FE-123 only to supply the I-59. If you want to use the same power supply for the I-57 and for other extension modules, you have to take in account the total sum of maximum consumptions for all of them to correctly and consequently use the suitable power supply.

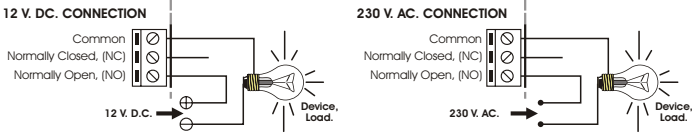
Install a fuse and a switch as it is indicated in the drawing. Both are obligatory to guarantee a correct protection of the module as well as for your own safety as it is required by the "CE" marking.

Connect the positive of the power supply to the positive terminal indicated in the Fig. 2, then connect also the negative of the power supply to the negative terminal indicated in the circuit. The distance between the power supply and the module as to be as short as possible. Verify that the assembly has been correctly done.

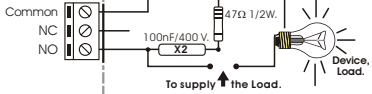
OUTPUT. CONNECTION OF THE LOAD. I-59 module's outputs are controlled by relays, devices electrically insulated from the rest of the circuit, they allow any load until 5 A. as maximum consumption. The relay is not a component supplying voltage but its function is limited to accept or deny the voltage passage like a standard switch.

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 as it is indicated in the Fig. 1. For the inverse function you have to place the load between the NC and Common.

Fig. 1. How to connect the Load.



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 47W. 1/2 W resistor) between both contacts of the used relay, as it is indicated on the drawing.



CONNECTION BETWEEN MODU

The CEBEK sequential "solution" has to be composed by a single I-57 and all required I-58 and I-59 extension modules, up to a maximum of 256 outputs.

Except on the I-57 module, as main control circuit, all extension modules have a communication input and output for a serial connection (cascade), between different extensions. The connection order between I-58 and I-59 extension modules is not important, and you can alternate between them.

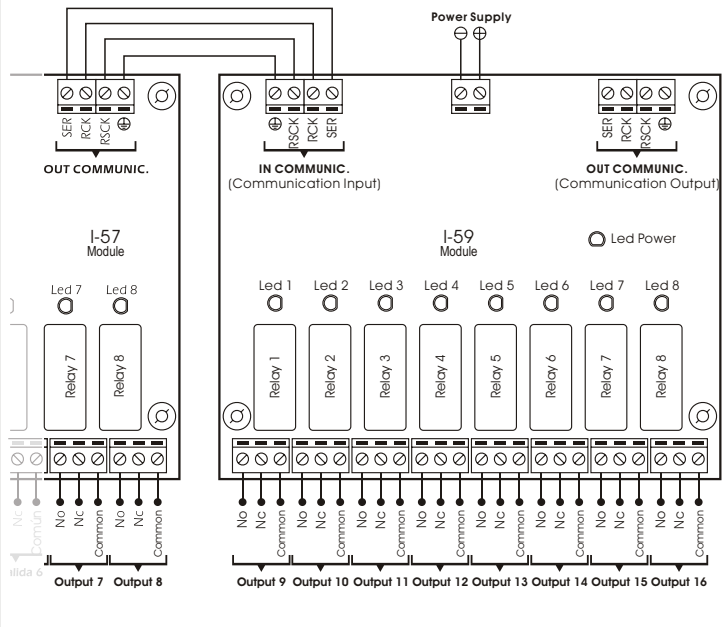
Connect the I-59's communication input, composed by terminals: SER, RCK RSCK and ground to corresponding communication output terminals of the last used module, or failing that to the I-57 module if it is the single circuit of the system. See Fig. 2.

In this connection, the maximum length has to be 30 cm, and if the length is superior you have to use shielded cable and to connect the braid to the ground. In any case, the maximum length has to be inferior to 60 cm.

The I-59's output has to remain without installation, waiting for a future connection or an other extension module.

Once the installation between circuits and their corresponding power supplies done, you have to configure the I-57 module as it is indicated in its manual instruction, indicating the outputs number which composes the system. In the paragraph "Ten-Binary Correspondence table" you will find all binary combinations to configure any extension. Then, you have to assign the corresponding one on the I-57 module.

Fig. 2. General Wiring. How to interconnect the I-57.



TEN - BINARY CORRESPONDENCE TABLE.

A large table with 10 columns (1-10) and 256 rows (1-256). Each row contains a 10-bit binary string. The first column (1) has a red arrow pointing to the right. The last column (10) has a red arrow pointing to the left.