

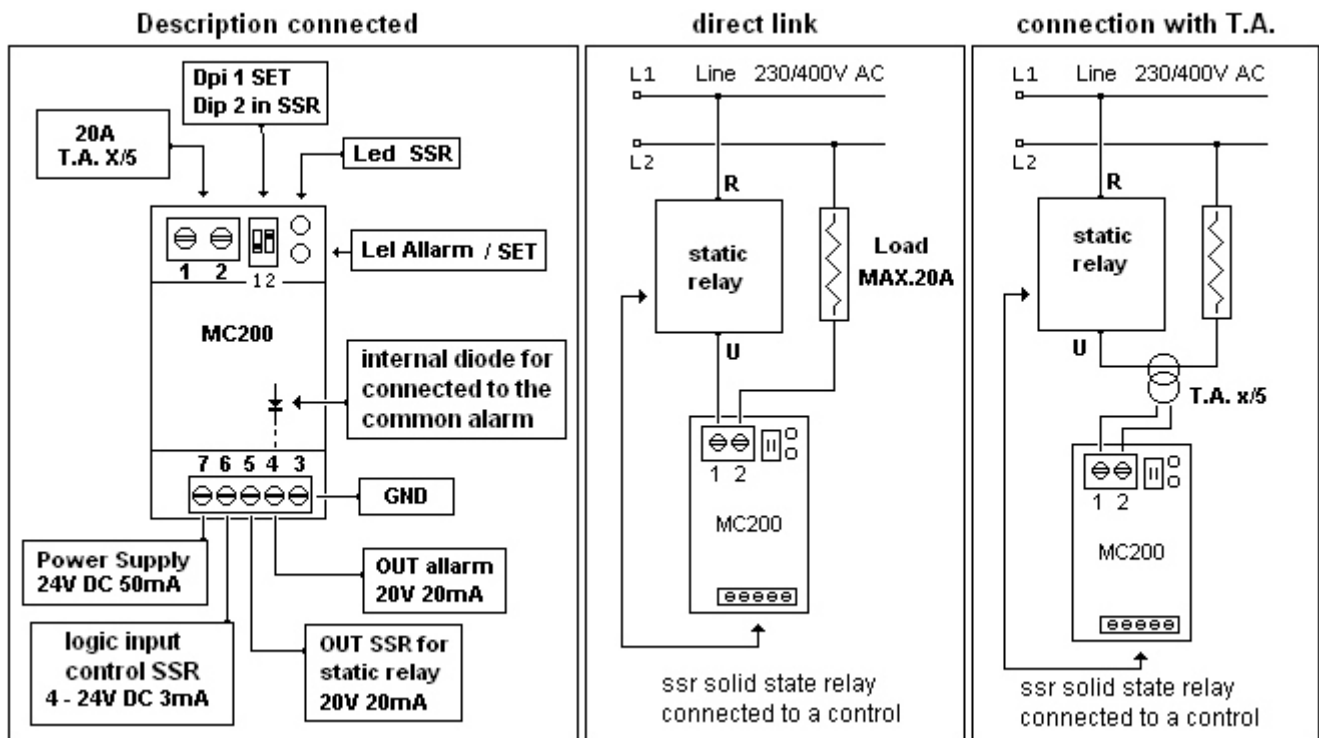
# MC200 Module for ammeter diagnostics.



This module is suitable to diagnose with proportional time zero-crossing static relays (SSR), stable single and three-phase resistive loads, consisting of two or more resistances (max no. 8 \*\*). By means of this device it is possible a continuous verification of the delivered current, each time you run the static relay. For the measurement of the current it includes an insulated transducer up to a maximum of 20A. Moreover, it is possible the use outside of a T.A. /5A to measure greater currents.

The module allows the automatic calibration of the maximum current threshold by means of a dip-switch on board the card and stores the value on E2 PROM. If the device measures a value lower than 1/8\*\* of the load, it issues an alarm that remains stored up to the reset of the same.

It is also able to diagnose the fault of the semiconductor, by testing in the absence of actuation signal that no current is present at the load. In the three-phase system, the signalling occurs by electrical consequence with the fault of two semiconductors.



## TECHNICAL SPECIFICATIONS:

- Power supply 24V DC 50mA Terminals 3(GND) , 7(+).
- IN SSR : 4 - 24V DC 3mA Terminals 3(GND) , 6(+).
- OUT SSR : 20V DC 20mA Terminals 3(GND) , 5(+).
- OUT Alarm: 20V DC 20mA Terminals 3(GND) , 4(+).

## Current detection specification:

- DIRECT terminal connection 1, 2 max. 20A 48-440V  
Minimum current detected 2A insulation toward controls 3000V.
- Connection with T.A. External X/5 Terminals 1, 2  
Minimum current detected 40% of the value of the T.A.

## SET Procedure for single-phase load:

- 1) Set to on the DIP 1 (SET), and to off the DIP 2 (SSR).
  - 2) Power the relay, both the auxiliary circuit and the power.
  - 3) The Alarm led will flash after 10 sec.
  - 4) Set to off the DIP 1 and to on the DIP 2 (SSR).
- The calibration is complete.

## SET procedure for three phase load:

- 1) Set to on the DIP 1 (SET) and the DIP 2 (SSR).
  - 2) Bring to 100% the SSR actuation signal.
  - 3) Power the relay, both the auxiliary circuit and the power.
  - 4) The Alarm led will flash after 10 sec.
  - 5) Set to off the DIP 1 and to on the DIP 2 (SSR).
- The calibration is complete.

## \*\*NB:

The accuracy of the current measurement and the ensuing alarm is closely linked to the factors of stability of the power supply line (+/- 10%), the pick ups of the controlled resistances and the percentage delivered by the static relays. These factors are partly taken into account in the fault eighth, but we recommend that if the load is not perfectly stable or sufficiently stabilized to consider a fault of one-sixth of the controlled load.

