M-GS20/40CO (17,5 and 30Amp.) 230-400V AC
Zero-crossing with AMMETER DIAGNOSTICS

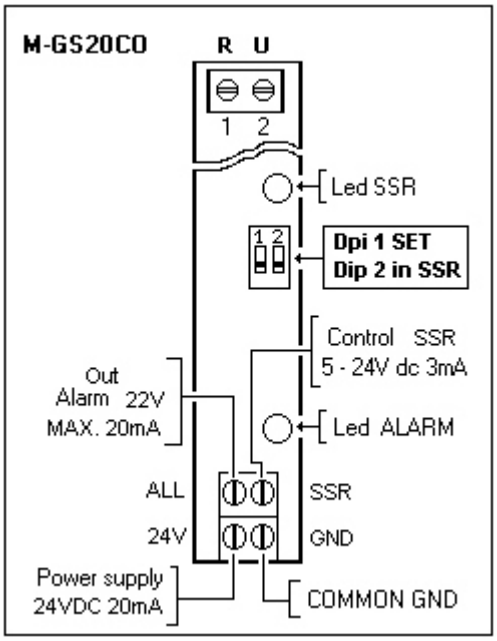
G.S.E.I. Controlli

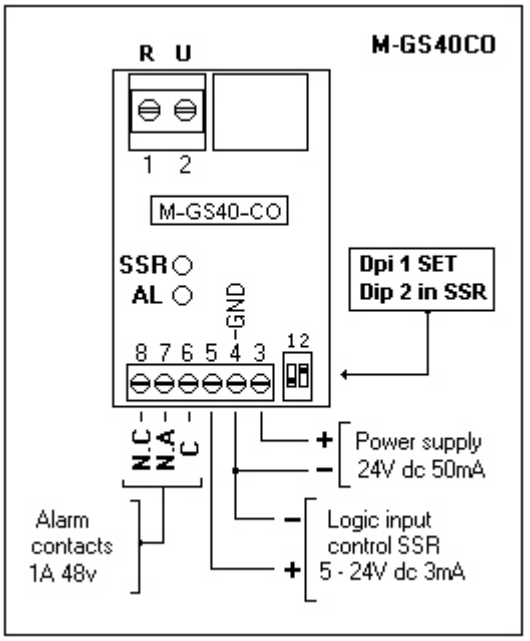
M-GS20CO
H.138-L.24-P.108
HOOKING FOR
DIN RAIL

Zero-crossing static relay with built-in ammeter diagnostics.
Suitable to logically control single and three-phase resistive loads composed of several resistances (max no. 8 **).
This relay performs a continuous verification of the delivered current every time it receives a control signal, and therefore is able to indicate the partial fault of the load in real time. For current measurement, they are provided with a 20 and 50 Amp insulated transducer. Using an on-board dip-switch you can automatically set the maximum current threshold, a value that will be saved in the internal memory. 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 its cause.
It is also able to diagnose the fault of the semiconductor, by testing in the absence of control 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.

Electrical connections

M-GS40CO
H.100-L.60-P.115
HOOKING FOR
DIN RAIL

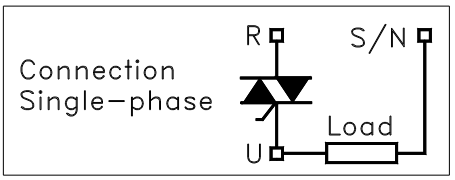




COMMON SPECIFICATIONS:
- Switched current at 45°C environment
  M-GS20CO (17,5A I2T450A) 230/400V AC.
  M-GS40CO (30A I2T880A) 230/400V AC.
- Power supply 24V DC 20mA (M-GS20CO)
- Power supply 24V DC 50mA (M-GS40CO)
- IN SSR : 5 - 24V DC 3mA

Alarm -Indication:
-Total break and partial load (1/8 *). semiconductor breaking load, fuse and voltage absence.
- OUT Alarm for M-GS20CO
  22V Max. 20mA
- OUT Alarm for M-GS40CO
  1A 48V 1 changeover relay
  Terminals 6(C) , 7(N.O), 8(N.C).

Current detection specification:
- Minimum measured current for M-GS20CO 2A.
- Minimum measured current for M-GS40CO 4A.
- Insulation toward 3000V controls.



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, the auxiliary circuit and the power.
3) The Alarm led will flash after 10 sec.
4) Set to off 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) all three static relays.
2) Bring to 100% the SSR actuation signals.
3) Power the relays, both auxiliary and power circuits.
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 provided 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 the fault of one-sixth of the controlled load.