MCS-IP, IP-MCS-DA Module for complete management of a single phase zero-crossing static relay.

Module suitable to control with a 15Vdc 30mA logic signal a zero-crossing static relay.
It is able to convert the various control signals that are found within the industrial field,
as potentiometers 1-10K, 0-10V and 4-20MA. These signals are converted into
proportional times (SSR) with 0.5 or 1 Sec. cycle times.
On the front there is a trimmer for limitation of the control signal and the event signalling
leds. It is able to run preheating cycles with fixed percentage of 30% for programmable
times of 0.5 -1-2 or 4 min.
Provides for the management of run and stop of the semiconductor, through a command
that enables at first a contact for the activation of a safety contactor and then the SSR
output for relay control.
Then it provides the reverse cycle for system stop.
This run/stop operation is essential to avoid creating electric arcs with mechanical
contacts, reason of major faults due to overvoltage of the semiconductors.
The MCS-IP-DA version has also the ability to diagnose through a continuous test the
possible faults of the system, i.e. the fault of the extra fast fuse, the total fault of the load
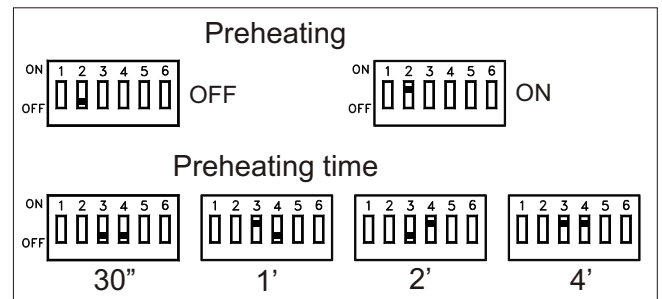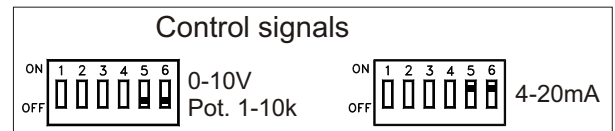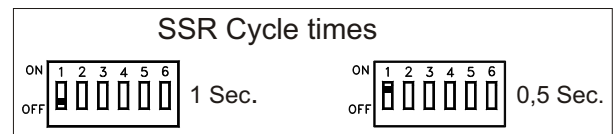and the faults of the semiconductor.

TECHNICAL SPECIFICATIONS:
- 24V ac/dc power supply 3VA (Terminal 1 and 2).
- Inputs: Pot 1-10K ohm, 0-10V dc and 4-20mA
  (Terminals 3, 4 and 5).
- Trimmer for signal limitation (only for 0-10V dc
  control) on the front.
- Out SSR 15Vdc 30mA (Terminal 6 and 7).
- SSR cycle times 0.5 and 1 Sec.
- Input with run external contact (Terminal 8 and 9)
  or with logical signal 12-24V DC between
  the terminal 2 (-) and the terminal 9 (+).
- Run contact activation time 0.1 Sec first out
  time SSR 2 Sec. SSR turn off time from stop
  0.5 Sec contact opening time 2 Sec.
- Preheating: fixed value of 30% for the time
  of 0.5-1-2 and 4 minutes. Start after run contact
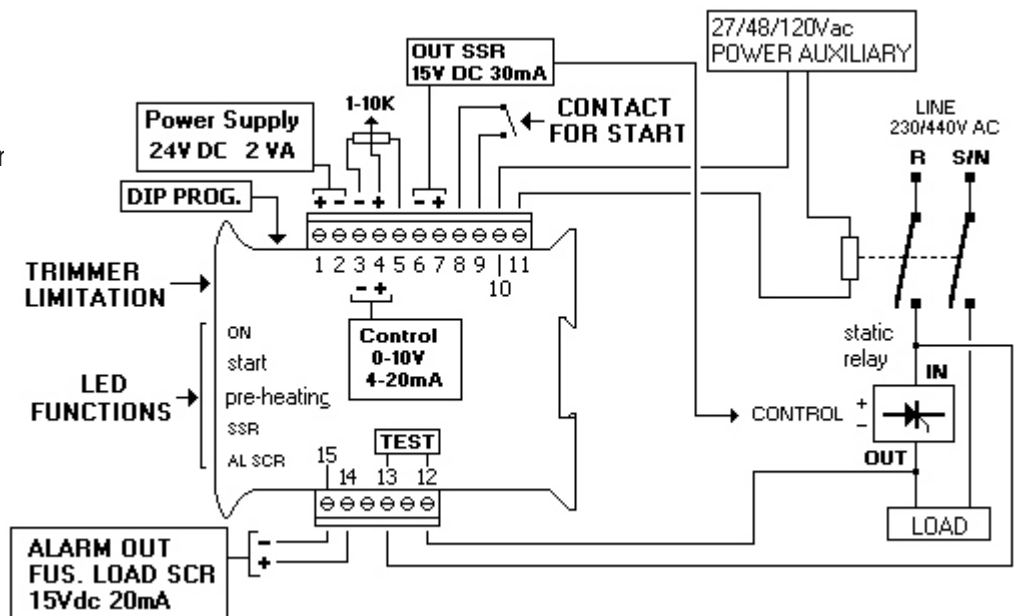 (if Dip 2 is enabled).

Version MCS-IP-DA
- Input test in, out SCR (Terminal 12 and 13).
- Test voltage at ends IN OUT 230-440V AC.
- Out Alarm 15V dc 20mA (Terminals 14 and 15).

PROGRAMMING DIPS

SSR Cycle times — 1 Sec. / 0,5 Sec.

Control signals — 0-10V Pot. 1-10k / 4-20mA

Preheating — OFF / ON

Preheating time — 30" / 1' / 2' / 4'

Technical note:
All the negatives, both the
control power one and the
alarm output one are commor

DIMENSIONS

Example of connection