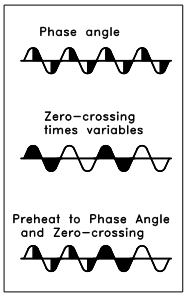
M-RS45 / 225PC SINGLE PHASE 240-440V ac 50-60Hz.
Static relay with double SCR antiparallel with speed fuse.
Zero-Crossing, Phase angle and mixed functions.
Control signals: SSR (12-24V), 0-10V and 4-20mA.

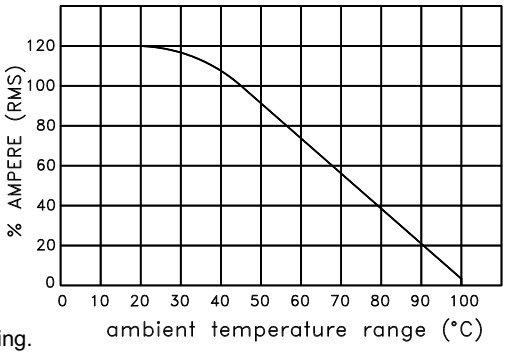
G.S.E.I. Controlli Elettronica Industriale

CE

MOD.	45A	65A	85A	125A	150A	180A	225A
Voltage supply	240–440V AC						
Electrical isolation	3500V						
I2t max. (t=10mS)	0,75KA	1,5KA	2,8KA	5,7KA	11,4KA	37,5KA	55KA
Speed Fuse	63A	80A	100A	160A	200A	250A	280A
Voltage SCR	1200V pk						
Fan	NO	SI	SI	SI	SI	SI	SI

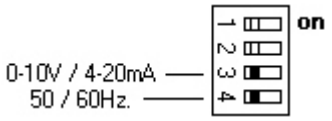


MAIN FEATURES :
The State Relays Series M-RS PCs are built to operate within a electrical panel to **100%** of the rated current at ambient temperature of **45 ° C**. Have within them **Extra fast fuses** for protection Short Circuit and **varistors** and **RC** for overvoltage protection. Using two **SCR** power in **antiparallel** for switching the current loads. They can be programmed via **DIP-SWITCH** operate in **Zero-crossing** or **Phase Angle** for the control of loads resistive or inductive. They are equipped with power terminals and assembled in a total structure of **Aluminum.** They are able to make starts **preheating** Phase Angle and then automatically switch to zero-crossing. All versions have an **Alarm** with logic output that includes any abnormality comprised the Heatsink **Overtemperature**. Where provided, the fan is activated by the integrated probe at **42°C**heatsink, thereby limiting improper use causing the accumulation of impurities in the heat exchange surfaces.



Programming DIP-SWITCH

Control Signal and line frequency:



DIP3 = (OFF) 0-10Vdc (ON) 4-20mA
DIP4 = (OFF) 50Hz. (ON) 60Hz.

Functions with control SSR ranging from 11 to 24Vdc

FUNCTION 1
- Actuation to **ZERO CROSSING.**
- Minimum cycle time (SSR) 0.2 Sec.
Suitable for resistive loads steady.

FUNCTION 2
- Actuation to **Phase Angle + Zero-Crossing.**
- Cycle time (SSR) recommended minimum 1 Sec.
- Time Soft-start Phase Angle from 0 to 100% 400mS.
- Soft-start time duration 5 Sec active time for SSR after the time of Soft actuation to **Zero-Crossing.**
- Restore time for Soft absence control SSR 2 Sec.
Suitable for resistive loads with high initial absorption.

FUNCTION 3
- Actuation to **Phase Angle.**
Internal conversion signal SSR to signal 0-10V.
- Cycle time (SSR) for conversion **1 Sec. +/- 2%**
- Update Time% actuation 1 Sec.
- Soft-Start from 0 to 100% 1 Sec.
Suitable for resistive and inductive loads.

FUNCTION 4
- Actuation to **Phase Angle + Zero-Crossing FAST.**
Internal conversion signal SSR to signal 0-10V.
- Cycle time (SSR) for conversion **1 Sec. +/- 2%**
- Update Time% actuation 1 Sec.
- Soft-Start from 0 to 100% 1 Sec.
- Duration preheating **phase angle** 5 Sec.
- Later preheating conversion to **Zero Crossing** cycle **SSR 500mS**.
Suitable for resistive loads with high initial absorption.

Control 0-10V DC, 4-20mA

FUNCTION 1A
- Actuation to **Zero-Crossing.**
- Conversion Cycle Time **(SSR) 500mS**
Suitable for resistive loads steady.

FUNCTION 2A
- Actuation to **Phase Angle.**
- Soft-Start from 0 a 100% 1 Sec.
Suitable for resistive and inductive loads.

FUNCTION 3A
- Preriscaldo ad **ANGOLO DI FASE .**
- Duration preheating **phase angle** 5 Sec.
- Soft-Start from 0 a 100% 1 Sec.
- Later preheating conversion to **Zero Crossing** cycle **SSR 500mS**.
Suitable for resistive loads with high initial absorption.

TECHNICAL DATA :
- POWER SUPPLY 24VDC 200mA
(50mA for 45A versions).
- SIGNAL logic control SSR
Between 11 and 24V DC 2 mA.
- SIGNAL control analog 0-10 Vdc and 4-20mA.
- ALARM OUT 22V DC MAX. 20 mA
Tripping time 1.5 seconds.
Internal diode for parallel connection.
Alarms include:
1) Rupture of the fuse.
2) Break the total load.
3) Breaking SCR.
4) Heat sink temperature over 85 ° C.
- DIP-SWITCH 4 positions include:
Dip 1 and 2 choice of the mode of operation of the load.
Dip 3 choice of sgnale control of 0-10V and 4-20mA.
(The control logic automatically excludes SSR analog controls)
Dip 4 choice of the line frequency between 50 and 60Hz.