Card SC-12Z TP (7 functions)

G.S.E.I. Controlli

12 Zones 8A 230-400V AC Cod. 1103
12 Zones 16A 230-400V AC Cod. 1104

- Card to control no. 12 single phase zones. Via DIP-SWITCHES located on the board you can set up 7 different actuation methods. Four with logic control 11-24Vdc and 3 with analog control 0-10V dc.
It is equipped with load, fuse, semiconductor fault diagnostics / triggers in all functions.
And 'in addition it equips control heatsink temperature with alarm over temperature and ventilation control intervention in version 12 zones 16A.
It must be powered with 24VDC 450mA. and is able to automatically adapt to the 50/60Hz. line and to the LOGIC or ANALOG control signal.

COMMON SPECIFICATIONS:
- POWER 24V DC 450mA.
- CONTROL SIGNAL LOGIC 11-24V DC 5mA. MINIMUM PULSE CONSIDERED 20mS.
- CONTROL SIGNAL ANALOG 1-10V DC 1mA.
- ALARM OUT 22V DC MAX.20mA IN COMMON FOR ALL ZONES. TIME FOR ACTION ALARM 1.5sec.
- Ambient working temperature 45 ° C max.

- **(SC-12Z TP / 8)** 12 ZONE SINGLE PHASE MAX. 8 Amp. 230-400V AC 50 / 60Hz.
- Extra fast fuses for each zone 20Amp. (I2t 125Amp 10mS.).
- **(SC-12Z TP / 8)** 12 ZONE SINGLE PHASE MAX. 16 Amp. 230-400V AC 50 / 60Hz.
- Extra fast fuses for each zone 25Amp. (I2t 240Amp 10mS.).
- Forced Ventilation control intervention at 45 °. and alarm at 85 ° C dissipator.

WITH SSR CONTROL (11-24V DC 5mA)

FUNCTION 1: Dip 1 (off), Dip 2 (off).
-**ZERO CROSSING** actuation.
- Minimum cycle time (SSR) 0.2 Sec.

FUNCTION 2: Dip 1 **(on)**, Dip 2 (off).
-**PHASE ANGLE + ZERO CROSSING** actuation.
- RECOMMENDED MINIMUM CYCLE TIME (SSR) 0.6 Sec.
- MINIMUM PULSE CONSIDERED 20ms.
- PHASE ANGLE SOFT TIME FROM 0 TO 100% 400mS.
- SOFT DURATION 5 Sec. OF SSR ACTIVE TIME.
- After the ZERO CROSSING soft actuation.
- TIME FOR SOFT RESET DUE TO LACK OF SSR 2 Sec.

FUNCTION 3: Dip 1 (off), Dip 2 **(on)**.
- PHASE ANGLE actuation.
- CYCLE TIME (SSR) FOR SAMPLING 1 Sec. +/- 3%
- MINIMUM PULSE CONSIDERED 20ms.
- ACTUATION % UPDATE TIME 1 Sec.
- SOFT START FROM 0 TO 100% 1 Sec.

FUNCTION 4: Dip 1 **(on)**, Dip 2 **(on)**.
- **PHASE ANGLE + FAST ZERO CROSSING** actuation.
- CYCLE TIME (SSR) FOR SAMPLING 1 Sec. +/- 3%
- ACTUATION % UPDATE TIME 1 Sec.
- SOFT START FROM 0 TO 100% 1 Sec.
- Phase angle preheating time 5 Sec.
- After preheating, conversion to Zero Crossing with 500ms. SSR cycle
- MINIMUM PULSE CONSIDERED 20ms.

WITH LOGIC CONTROL (0-10V DC 1mA)

FUNCTION 1A: Dip 1 **(on),** Dip 2 **(off).**
- **ZERO CROSSING** ACTUATION.
- Control Conversion 0-10Vdc in proportional cycle times (SSR) of 500ms.

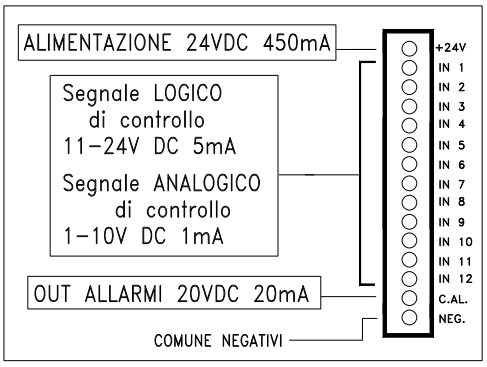
FUNCTION 2A: Dip 1 **(off),** Dip 2 **(on).**
- **PHASE ANGLE** actuation.
- Control proportional to the signal 0-10V.
- SOFT START FROM 0 TO 100% 1 Sec.

FUNCTION 3A: Dip 1 **(on),** Dip 2 **(on).**
- **PHASE ANGLE + FAST ZERO CROSSING** actuation.
- Control proportional to the signal 0-10V.
- Phase angle preheating time 5 Sec.
- After preheating, conversion to Zero Crossing with SSR proportional cycle times of 500mS.

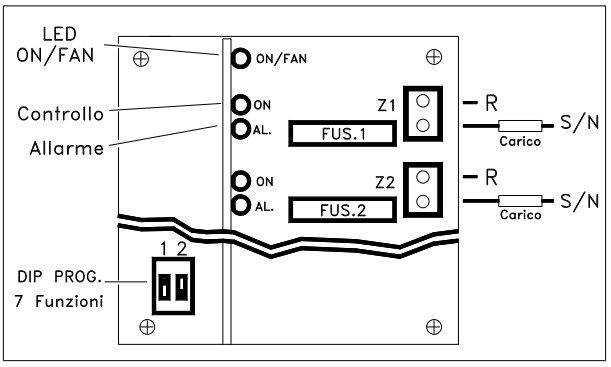
NB: DISSIPATED POWER 1W / Ampere switched for zone.

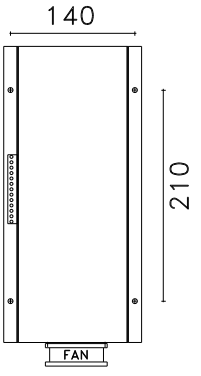
DIMENSIONS: Width 150mm. Depth 115mm. Height 340mm. (Height 370mm. Mod. SC-12Z TP/16)

Terminal panel Card



Card





LOADS AND LINKS:
- To control constant draw resistive loads, use the **FUNCTION 1 (SSR).** With this function it is also possible to control three-phase loads with double single-phase method using two zones, or three zones for pure three-phase.
- To check resistive loads with strong initial draw (ONLY IN SINGLE-PHASE MODE), you can use all the FUNCTIONS except function "1" mentioned above.

BEHAVIOUR OF THE DIAGNOSTICS:
When the trigger is powered and the voltage of the load to be controlled is not yet present, the diagnostic device (in this case, it is as a fuse fault) issues no alarm, waits for the arrival of the first control signal. This allows to turn on the load properly, first voltage to the load, then control.

BEHAVIOR ON / FAN:
When powering the card LED ON / FAN emits a pulse cyclical, exceeded the 44 ° C heat sink emits two pulses fastest cyclically, this indicates that you activated the fan. When the LED is constantly ON indicates that the heatsink has exceeded the temperature of 86 ° C, the alarm is signaled by activating out in the common alarms C.AL.