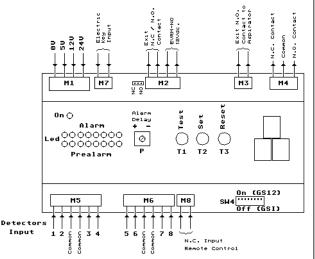


## Control Mod. GSI 4/8 for detectors GSI and GS12

Control for gas detectors with different possibilities of intervention. It can drive 8 GSI detectors or 8 GS12 detectors. Box IP65 (size 41x28x14,5cm)



**Technical characteristics :** 

- Supply 230Vac. 50-60Hz
- Possibility of running detectors
- with contacts N.C. or in tension - Possibility of auto-supply with
- external battery (plug)
- Possibility of running alarm signals from other security devices
- Regulation of pre-alarm time (from 2 to 50 seconds)
- Signalling of pre-alarm area
- Memorization of alarm area with manual reset
- Three relays of exit for controls - Button of alarm test
- Insertion of the control with keyswitch
- Possibility of running antitheft detectors with choking with electric key
- 1) Led signalling green = Insert tension
- 2) Led signalling yellow = detetor alarm checked and begin alarm delay
- 3) Led signalling red = central alarm with detector memorization on alarm
- 4) T1 WHITE button = function of :
  - Impulse = "Test", alarm simulation (activation aspirator and electricvalve)
  - Always pressed = setting out pre-alarm time (delay between the detector alarm and the control alarm)
- 5) T2 GREEN button = "Set" function: at every impulse permit the

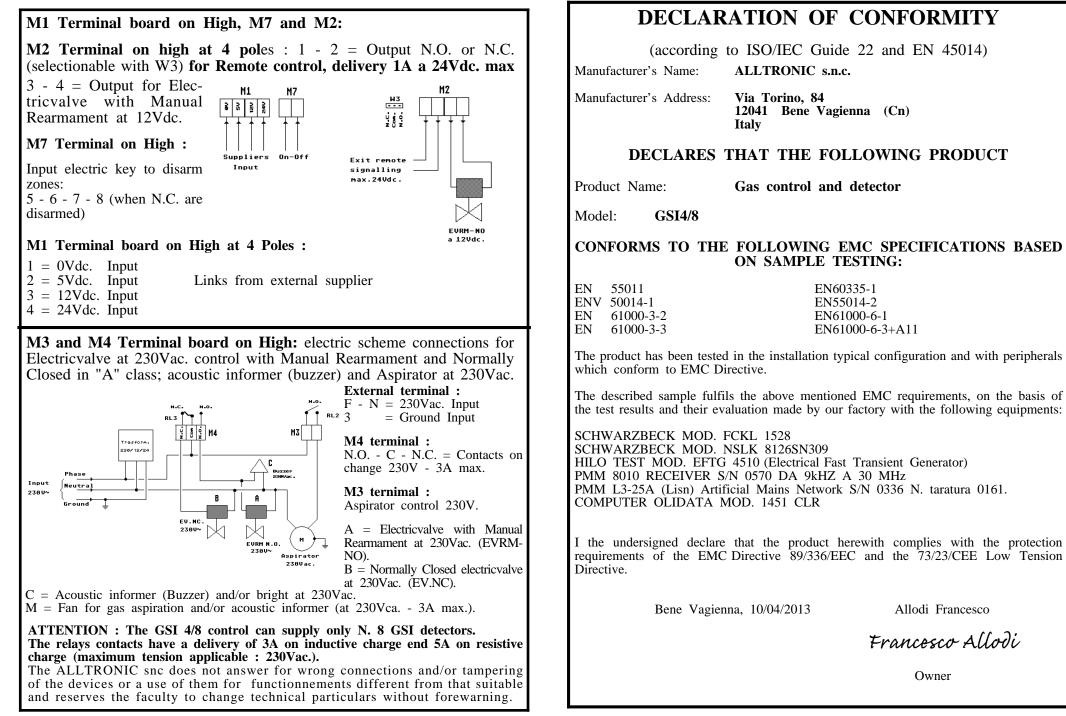
visualisation of any single area (8 areas) with reading of gas per cent survey if detectors mod. GS12 are used

- 6) T3 BLUE button = "Reset" function: it takes again the control in watch state (if there are no more detectors on alarm), reinstates electricvalve and aspirator.
- 7) Buzzer signalling alarm
- 8) Trimmer P = Trimmer of delay alarm regulation (holding T1 pressed) delay time : from 2 to 50 seconds.

9) On-Off key = release of the control supplier (but not the detectors) and it closes the electric valves.

The GSI 4/8 control has 3 exit relays: - Pre-alarm Relay (control informersaspiratoris) with release at once to the detector alarm (it maintains itself for two minutes after the reset of the detector on alarm) - Alarm Relay (control electricvalve-informer) with manual reset "T3" BLUE button- Relay for control of Closing Electricvalve Normally Open at 12Vdc. and Exit N.A. contact or N.C. at 24Vdc max. (selectionable with W3 shunt) for remote control.

# Scheme of connection GSI 4/8 control



# In case of alarm :

1) Extinguish all flames.

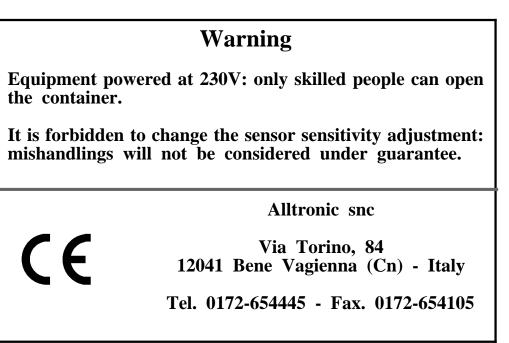
2) Turn off the tap of the gas-meter or of the LPG bottle.

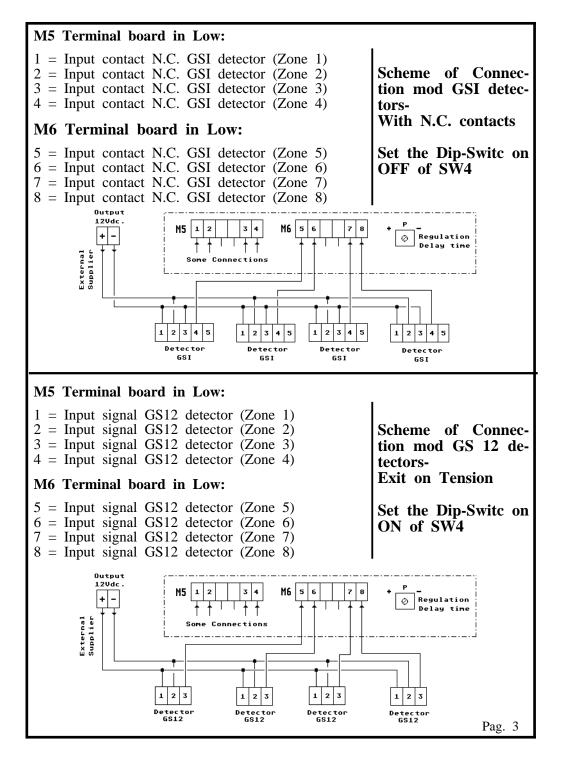
- 3) Do not switch on or off lights.
- do not start equipments electrically powered.
- do not start devices electrically powered.

4) Open doors and windows to air the room.

If the alarm stops you should find the cause and remove it.

If the alarm does not stop and the cause of the gas loss cannot be found or removed, leave the house or the boilerhouse plant and warn the emergency service (firemen).





## GAS SENSOR INSTALLATION

The control should be placed in a proper environment, avoiding excessive humidity fumes and heat.

#### CONNECTION TO THE SENSORS :

It is advisable to use n.1 multiwire cable for each sensor (antitheft device). As far as the supply is concerned, the lowest cable section should be of at least  $1 \text{ mm}^2$  for only one sensor at a max. distance of 50 m (it will become of  $1,5\text{mm}^2$  till 100 m). If more sensor have to be connected on the same cable, use proper size according to the number of the connected sensors.

NOTE: When passing near wires at 230Vac., it is advisable to use screened wires in order to avoid dangerous inductive effects. When testing, check with Vac tester between the 0V of the control and the heart if there is an inductive voltage: in the positive case connect the 0V to Ground.

#### - IMPORTANT :

According to the safety rules you must ALWAYS connect the special terminal of the unit to Ground (heart).

The control GSI 4/8 can supply only .8 detectors type GSI or 8 detectors GS12, therefore serious damages can happen if this limit is exceeded.

#### - OUTPUTS :

The control type GSI 4/8 can control valves with Manual Reset and/or Normally Closed in class "A". Remember to exactly follow the diagram in the previous pages when connected them.

#### - WARNING :

The control GSI 4/8 can control valves type N.C., those with Manual Reset at 230Vac. and the EVRM at 12Vdc. (see diagram).

It is possible to use more valves at 230Vac. connecting them in parallel, but for the EVRM at 12Vdc you can connect ONLY ONE.

### GAS SENSOR INSTALLATION

The sensor should be placed in the area to be inspected according to the law requirements and the following instructions :

- -To detect light gases (methane): place it nearthe ceiling (10 30 cm.).
- -To detect heavy gases (LPG): place it near the floor (10 30 cm.).
- -Do not place it directly upon kitchen stoves.
- -Do not place it nesr fans, suction fans or refrigerations systems.
- -Do not place it near areas where there is much steam.
- -Do not place it in areas where there is splashing water.
- -Install it in places safe from possible damage.
- -Place it avoiding any impediment between the sensorand the kitchen.
- -Place it so as to permit easy handling and maintenance of the unit.

-Remember that the sensor can be affected by composed gas (alcohol, cigarette smoke, deodorizers, insecticides).

-Install the sensor taking care not to inadvertently disconnect it from other switches. -Remmber to periodicallytest its performances sprying some light gas (e.g. cigarette lighter gas) on the sensor.

## CONTROLS FOR DETECTORS GAS TYPE GS 200 - GSI 10 - GSI 20 - GSI 22 - GSI 40 - GSI4/8

## Maintenance

For users

The gas control type GS and GSI have a working period guaranteed for 6 years (the guarantee of the unit covers the faults for 1 year) and supply detectors that are self-controlled.

In any case the sensor should be tested at least every 3 months, pressing on "TEST" (or with cigarette-lighter gas on detector) and checking the valve closing.

## Operation

The detectors-equipment controls contingent gas leaks and, if they exceed the 20% of the Lower Limit of Explosion, it starts the control to which it is connected In this case you should follow the instructions on page nearby.

The alarm by means of a buzzer and the yellow and red warning leds indicates the sensor fault; in this case you should ask the manufacturer advice in order to restore the operation of the unit.

The user should be present during the final test made by the installer, in order to learn about the operation of the gas detector and control and to make sure that the following data are filled in:

Date of installation :

Expiry of guaranteed working period :

Installation room :

Serial number (on the bottom of the sensor) :

The installer : (stamp and signature)

Address :

**DETECTABLE GAS :** (cross out that not detected)

NATURAL GAS - L.P.G.

