

Product Overview

The GS-P60 range of stand alone gas sensors are designed to detect the presence of gas leaks and give both audible and visual warning and a relay output . The units are designed for use with normally-open gas solenoid valves , with manual reset .

Features

- Stand alone wall mounted Gas detector
- Three Indicator LED for power on,, fault, alarm
- 5 year sensor life
- SPDT relay for remote alarm indication

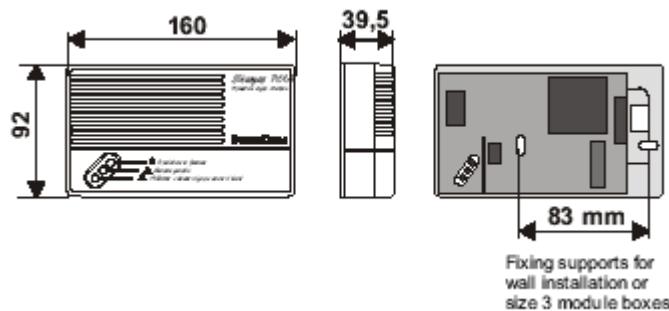
Product Specifications

Sensor Type:	Semi-Conductor						
Alarm Threshold Range:	< 20% LEL (fixed)						
Power Supply:	230Vac 50 Hz						
Power Consumption:	4VA						
Relay Contact:	SPDT - 6A@240Vac resistive (2A inductive)						
Audible Alarm:	85dB Piezo						
LED Indication:	<table> <tr> <td>Green</td> <td>Power on and sensor operating</td> </tr> <tr> <td>Yellow</td> <td>Sensor Fault</td> </tr> <tr> <td>Red</td> <td>Alarm - Relay operates</td> </tr> </table>	Green	Power on and sensor operating	Yellow	Sensor Fault	Red	Alarm - Relay operates
Green	Power on and sensor operating						
Yellow	Sensor Fault						
Red	Alarm - Relay operates						
Ambient Temp. Range:	10 to +40 deg C , 0-90%RH						
Dimensions:	160 x 92 x 39.5 mm						
Protection:	IP42						
Weight:	0.40kgs						
Conformity:	CE marked,						
Country of Origin:	Italy						

Order Codes

AX-GS-P11A	LNG (methane) Sensor
AX-GS-P12A	LPG (propane) Sensor

Dimensions



OPERATION AND INSTALLATION

-Sicurgas cuts in when the concentration of gas is well below the lower explosion limit (L.E.L.) by immediately switching on the red LED. If the alarm persists, an audible alarm is also triggered to warn of danger; Sicurgas simultaneously triggers a relay to control a gas cut-off valve. -Sicurgas has 3 indicator LEDs:

-green LED to indicate that the detector is operating correctly

-yellow LED to indicate a fault in the detector

-red LED to indicate the presence of gas in the environment (ALARM)

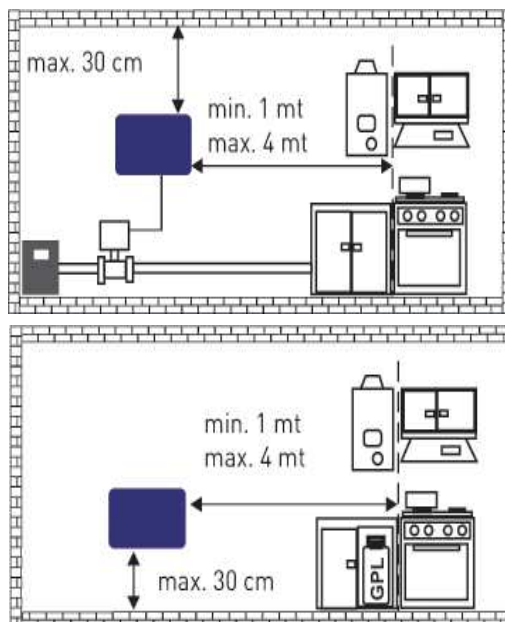
-Via a relay the detector controls both the normally closed (NC) and the normally open (NO) manual reset valves.

-Silencer button to inhibit the audible alarm and valve control for about 10 minutes; after this time Sicurgas returns to normal operation.

SICURGAS PLACEMENT

Sicurgas P11 must be fixed on the wall, about 30 cm from the ceiling and at a distance from gas user device, between a minimum of 1 meter and a maximum of 4 meters, in such position as to allow natural air circulation.

Sicurgas P12 must be installed approximately 2 meters (minimum 1m maximum 4m) from the gas user device and about 30 cm from the floor.



ELECTRICAL CONNECTIONS

Sicurgas P11 is already equipped with two internal alarms: one visible and one acoustic.

Just connect the line 230V c.a. 50Hz to the terminals 4 and 5 to ensure the gas presence signaling in the environment.

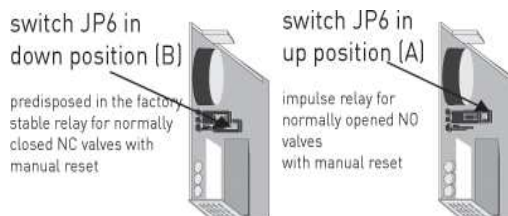
It is recommended to use a valve with manual reset to stop the gas supply when there is an alarm situation.

The internal relay can control all kind of power supplied valves with manual reset:

- normally closed (NC), always power supplied, which require a commutating stable relay;
- normally opened (NO), which require an impulse relay.

Relay operating mode can be chose in the installation moment, by moving a switch (JP6) on the printed circuit, normally supplied for functioning with stable relay for NC valves (down switch).

! ATTENTION!
DO NOT place the device behind or under cabinets or shelves that are not allowing the natural air circulation in environment.
DO NOT place it near aerators (minimum distance 2 meters).
DO NOT place it on the vertical bakery surfaces, steam sources, in places where can be achieved by splashing water, near sinks, etc.
Do not place where environmental conditions are different from the prescribed operation conditions.



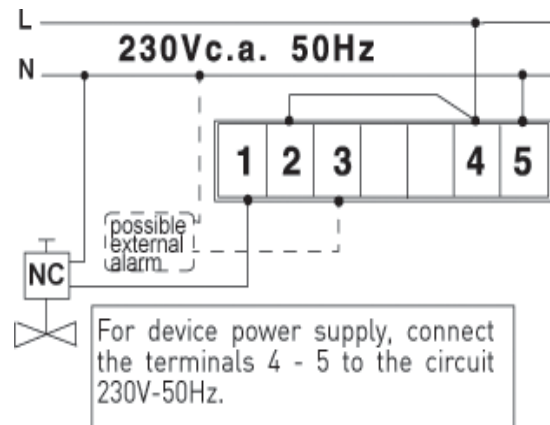
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EXAMPLES OF CONNECTION

EXAMPLE OF CONNECTION with stable relay, always power supplied, to control a normally closed valve with manual reset (down switch).

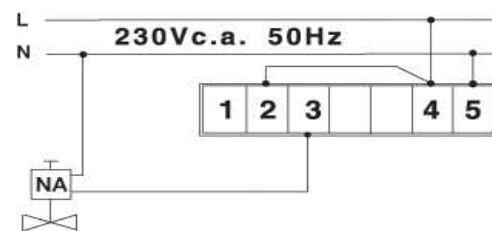
The system guarantees maximum safety, the gas inflow will be stopped in case of:

- gas concentration threshold exceeding;
- power supply lack of the valve only or of the detector;
- connection breakdown between the detector and the valve.



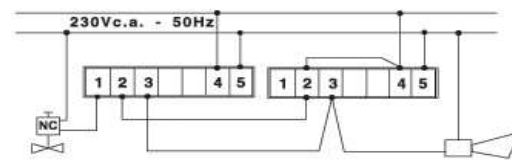
IMPULSE RELAY, WITH CURRENT ACTIVATION, TO CONTROL A NORMALLY OPENED VALVE WITH MANUAL RESET (SWITCH IN UP POSITION)

The connection will ensure the interruption of the gas inflow in case of gas concentration threshold exceeding.

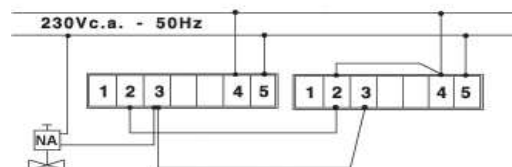


USING MORE SICURGAS UNITS TO CONTROL SEVERAL ROOMS WITH ONE GAS VALVE

Example of connection for several Sicurgas detectors with stable relay that controls the same normally closed valve NC and an external alarm. The contacts must be connected in series.



Example of connection for several Sicurgas detectors with impulse relay which controls the same normally opened valve NA. The contacts must be connected in parallel.



DEVICE CONTROL AND SILENCING ALARM

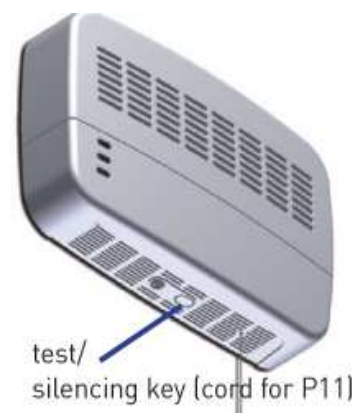
Sicurgas is provided with a TEST/SILENCING key, that allows to check the installation or to inhibit the alarm. This key is activated through a cord for P11 methane gas (installed about 30 cm from the ceiling) or through a button located on the body of P12 LPG (installed about 30cm from the floor).

To test the installation press the TEST/SILENCING key for 10 sec. In this way will be activated a control procedure of about 30 sec., during which will be checked installation components.

Alarm inhibition is used instead to avoid an involuntary intervention of the detector, in fact Sicurgas sensor, as all available on the market sensors, while being very selective can also participate for other substances, for example: alcohol vapors, wine etc.

For example, during the use of wine while preparing food is possible, that the detector will enter in alarm situation. To avoid this inconvenience press the TEST/SILENCING key for approx. 3 sec.

After having pressed the silencing key, for 10 minutes we will have a non-alarm situation: the buzzer does not emits acoustic signaling, the relay returns in non-alarm position and the red and green led, are flashing alternately to indicate the silence period; acting again on the switch during 10 minutes of the silence period, the detector will immediately resume the normal operation.



Operating Hours

After 10 minutes, the detector resumes automatically the normal operation.

Here is possible, knowing that can be used substances which can cause a false alarm, to reduce in advance detector's sound to prevent the signalizations and gas shut off of the stoves (due to gas valve intervention).

SOME OF THE MOST COMMON SUBSTANCES THAT CAN CAUSE FALSE ALARM ARE THE FOLLOWING:
wine - liquors - alcohol - deodorants - stain-removers - varnish thinners - hair spray - excessive steam.

Sicurgas also allows to set the type of the acoustic alarm, see picture on the side.

INTERMITTENT SOUND
switch JP3
in up position (A)



CONTINUOUS SOUND
switch JP3
in down position (B)



MAINTENANCE AND CLEANING

Pay attention to temperature values or to the extreme humidity.

To give the maximum security the detector must be constantly powered.

For routine maintenance and for the temporary closing-down of the device, it is recommended to contact an authorized technician.

Regularly check the correct operation using the appropriate button or a gas test.

OTHER TEST METHODS MAY DAMAGE THE EQUIPMENT.

To clean the unit, use a soft cloth without using chemical cleaners or solvents.



ATTENTION! in case of alarm:

1. turn off all opened flames in the room.
2. close the tap of the gas meter or of the L.P.G. gas cylinder.
3. do not switch on or off lights, do not operate electrical equipments or other electrically operated devices.
4. open the windows and the doors to raise the ventilation inside the room.
5. do not use telephones in the room where you suspect gas presence.

If the alarm stops it is necessary to identify the matter that caused it and act accordingly.

If the alarm continues and the gas leak cannot be identified or cannot be eliminated leave the room and from outside call the emergency services.