SIEMENS

SIEDEGAS

Control panel for the detection of toxic and explosive gases and oxygen

SIEDEGAS has been designed for the detection of up to four different gases simultaneously per module line, thus expanding the field of application for industry in general, car parks and tunnels.

Equipped with "Plug and Play" technology, it automatically detects the number and type of detectors, as well as the various devices connected to its loop, auto configuring the ranges, the appropriate alarm and ventilation levels for each case, type of gas, thus adjusting them to most TLVs and current standards.

The software in the control panels has been designed for easy programming and understanding, making it possible to extract the maximum performance of the system in all fields of application, making them currently the most versatile control panels in the market in terms of detection, flexible programming and functionality.

Access to the menus is divided into two blocks: Engineer and User. They are clear and easy to use, allowing a quick interpretation of the data shown.

Doors and keys have been eliminated, being substituted by passwords, for engineer and user modes.

Structural elements in common with other models have been used to reduce cost. We have reduced volume and weight by designing the frontal part of the panel in injected ABS plastic. This will allow a reduction in transport costs.

In its mechanical design, the use of screws has been reduced by 95%, all circuits and panels being assembled using clips and connectors, which allows to rapidly substitute elements in case of malfunction.

We have substituted the lettering in the keypads by symbols of easy universal interpretation, making it easier to use in different countries and with different languages.

MAIN CHARACTERISTICS

- Detectors of any gas and working principle, relay modules and 4-20mA to RS485 conversion modules may be connected to every module line loop.
- The system is retro compatible, being able to control the complete range of detectors for the EUROSONDELCO and SIEMENS CC62P being manufactured up to this day.
- Up to three standards can be programmed: Spanish, Portuguese or German/Swiss, this last one with two different programmable working modes; standards or averages. Up to 4 languages can be chosen: Spanish, English, Portuguese or German.
- Up to 4 groups can be programmed with one speed ventilation or 2 groups with two speed ventilation, allowing in this way individual maneuvers in the case of different gases, or sectoring maneuvers for the same gas.
- In cases in which only 3 gases are used, it is possible to program 4 groups and use only three.
- The control panel is expandable from one to four module lines, with a capacity of up to 16 detectors per module line (64 in total), being capable of controlling detectors for CO, H_2S, SO_2, HCN, NO, NO_2, NH_3, HCL, Cl_2, CO_2, O_2 and EXP with their different ranges and alarm levels, whatever their communications system, RS485 up to a maximum distance of 1Km, or the 4-20mA standard, this last one via an optional interface unit that converts this signal to RS485 and automatically addresses them. This even allows connection of detectors with both systems of communication in the same module line.
- Every module line includes four voltage free switched relay outputs, one 12V latching/bistable alarm voltage output, one 12V auxiliary fixed voltage output for supply of devices and one 12V output for loop power supply, all of them fuse protected. The alarm outputs, the auxiliary and the loop one with automatic rearm fuses.
- Includes 7 optical indicators: general fault, acoustics inhibited, earth fault, battery fault, grid presence, manual rearm pending and keypad unblocked status.
- Each module line operates independently, and includes a backlit 16X2- character line LCD display.

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- Its maneuver capabilities may be increased by the use of remote modules that include four maneuver relays, plus one for general alarm, all of them with switched outputs, dry contact and fuse protected, and that can be connected at any point in the loop, up to a maximum of five modules per module line. This allows for easy programming of any type of association between the module line relays, remote module relays, and the detectors. For example, an association of one relay for each detector may be programmed.
- Individual events memory per module line.
- An optional module may be incorporated that allows for the integration of the system in OPC-SERVER or MODBUS. This module is backward compatible with the integration systems currently used.
- Equipped with a 13,8V 5A power source, plus a module that controls the charge, presence and status of a battery of up to 12V 7,5Ah, date, time, and data traffic between module lines, plus a general fault relay output.

A non-expandable, one module line SIEDEGAS mini version is also available, with the same characteristics as the expandable model, although without the possibility of integration.

MODULE LINE TECHNICAL CHARACTERISTICS

Technology.	24 bits microprocessor.
Power.	From 9V to 15V DC.
Maximum consumption.	150mA.
Maximum loop length.	Up to 1 Km, shielded 4-wirecable, 2 x 1,5 mm^2 for power supply and 2 x 0.25 mm^2 twisted pair for communications.
Maximum reading capacity per module line.	Up to 16 detectors.
Programmable reading modes.	Sequential or maximums.
Data presentation per module line.	Backlit LCD display 16 x 2 lines of alphanumeric characters.
Reading speed.	2s per detector – sequential mode – and 2s in total in maximums reading mode.
Outputs.	4 – Independent outputs per module line 3A 250V AC dry contact, fuse protected. 1 – General alarm 12V-300mA switched, 1 – auxiliary 12V-300mA, both protected with automatic self-resetting fuse, 1 – for loop power supply 12V 3A protected with automatic self-resetting fuse, 1 – latching output of 12V and 1 – for battery 12V DC 7,5Ah, fuse protected.
General fault output.	1 – voltage free C, NC at rest.
Switched power source.	13,8V 5A. SIEDEGAS 1 to 4 module lines / 13.8V 2,4A SIEDEGAS Mini 1 module line.
Mains input.	120-240V AC, 47-63Hz.
Approximate consumption.	30W SIEDEGAS 4 module lines – 10W SIEDEGAS Mini 1 module line.
Cabinet measurements.	SIEDEGAS control panel 1-4 module lines 390x288x140. SIEDEGAS Mini 1 module line 170x115x45.
Weight -kg- and protection grade.	5.3 for the 1-4 module line panel (150gr. per extra module line). 2.7 in the SIEDEGAS Mini version 1 module line – IP40.

Compliant with (CO) UNE 23.300:1984 STANDARD Certificate LOM 14MOGA3168
Certificate from the Ministry of Industry (CO): CDM-0110010 (SIEDEGAS) & CDM-0110011 (SIEDEGAS Mini)