

"LARES" series GAS DETECTORS



Description

The "LARES" gas detectors have been designed and manufactured so as to offer the customer innovative but cost effective devices.

The catalytic sensor employed in the "LARES" detectors offers unquestionable advantages over the traditional semiconductor, namely: high stability of the zero point, linear response curve, rapid settle time, longer life span, selectivity of response.

The new detectors from the "LARES" range have been designed to detect Methane and LPG according to the European Standard EN50194 (LA-ME220 and LA-GPL220) with preset alarm threshold at 10% LEL equal to 0,50% by volume and Ethyl Ether (LA-ET220)

offering a reliable protection against narcosis caused by the ether contents in soporific gas.

We recommend the installation to be carried out by competent personnel as incorrect positioning of the detector can reduce its effectiveness.

Methane is a gas lighter than air and tends to rise upwards; the detector must be placed 30cm from the ceiling in order to maximise the effectiveness of the detection.

LPG and **Ethyl Ether** are heavier than air and tend to spread downwards, therefore detectors are to be placed at around 30 cm from the floor to get a fast response to gas leaks.

The features of the new "LARES" gas sensors are:

- Relay output
- Fault circuit similar to that found in industrial gas detectors, which is activated by sensor failure or electronic malfunction
- Hold off circuitry, which inhibits any alarm for approximately one minute after power-up thereby avoiding any unnecessary alarm activation.

All detectors are individually checked and tested in an atmosphere with a predefined concentration of gas.

An alarm condition generates the following:

1. Visible warning: red LED light up
2. Audible warning: continuous sound emitted by the internal buzzer.

3. Output relay activation.

The relay contact is able to activate other devices such as 220V solenoid valves. Once the detector enters an alarm condition, the Normally Closed solenoid valve activates and when the cause of the alarm is ascertained and solved, then the valve can be manually opened to let the gas flow.

Electrical Specifications

	LARES for Methane	LARES for LPG	LARES for Ethyl Ether
Preset alarm threshold	10 % LEL	10 % LEL	1.100 ppm
Current Consumption	50 mA		
Contacts rating	16 A at 220 Vac or 16 A at 14 Vdc		
Operating temperature	-10/+45 °C		
Storage temperature	-20/+60 °C		
Relative humidity	15/90 % Rh		
IP rating	IP42		
Dimensions	75 x 155 x 42 P. mm		

Lares range:

LA-ME220: Flammable gas detector with catalytic sensor calibrated to Methane. Preset alarm intervention at 10% LEL, with buzzer and output relay. Power Supply: 220Vac. Complying with the European Standard EN 50194

LA-GPL220: Flammable gas detector with catalytic sensor calibrated to LPG. Preset alarm intervention at 10% LEL, with buzzer and output relay. Power Supply: 220Vac. Complying with the European Standard EN 50194

LA-ET220: Flammable gas detector with catalytic sensor calibrated for Ethyl Ether. Intervention alarm threshold at 1000 ppm, with buzzer and relay output. Power supply: 220Vac.



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