Gas leak detector GS-130

The GS-130 detector is used to indicate leaking of combustible gases (natural gas, methan, propane, butane, hydrogene).The detector detects two levels of gas concentration - different output reactions.

The main GS-130 features are: high reliability and sensitivity, compact size, 230 V (110 V optional) power supply and long stability & lifetime.

Installation

A professional installer should install the detector.

The detector is intended to instalation f*or non-explosive areas – e.g. flats, domestic premises, commercial areas or gas boiler houses.*

Selection, instalation and use we recommend to realize in compliance with EN 50244 and EN 60079-29-2.

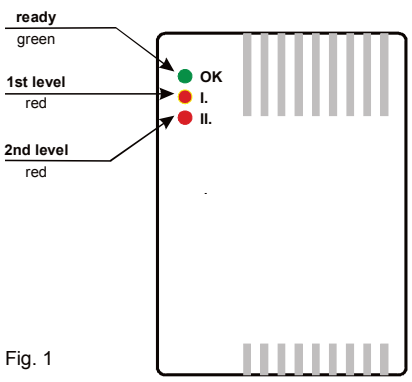

Fig. 1

Fix the detector on the wall. For gases lighter than air (natural gas, city gas etc.) install it close to the ceiling (max. 15 cm under it) or directly on the ceiling and on the place expected to have gas leakage. For gases heavier than air (propane, butane, etc.) install it close to the floor or on the lowest place of the room. The detector should not be located close to any obstacles preventing natural air circulation.

Memory

The memory function is disabled by factory default (when the concentration of the gas drops down to normal, the GS-130 will stop the alarm signal).

Close the MEM jumper to select the memory function. Then the alarm indication, if triggered, will not stop unless the GS-130 power supply is terminated for a while.

Power supply

Connect the power cord to the terminals marked 230 V AC (or 110 V AC). The power inlet should be fused with an external fuse (max. 10 A).

Output relay function

There is a dry relay contact available on the GS-130 output terminals:

- C - common contact
- NO - normally open contact
- NC - normally closed contact

This relay output can be used for an automatic gas-valve closer, alarm system triggering or for other warning systems.

When the automatic gas-blocking function is used, the application of this shall be according to national regulations and EN 1775.

If the REL jumper is open, the relay will be triggered after the 1st level of gas concentration is detected. If the REL jumper is closed, the relay will be triggered after the 2nd level of gas concentration is detected.

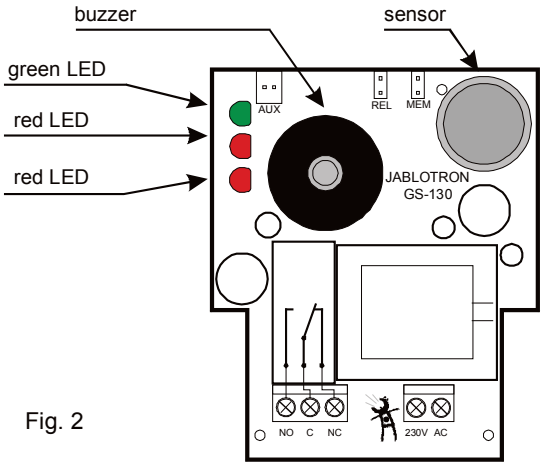

Fig. 2

Function

After switching the power on, the green LED will flash for 60 sec. (the detector warms up). When the green indicator lights permanently the detector is ready.

If the gas concentration reaches the 1st level, short beeps will sound and red LED I will go off.

If the gas concentration reaches the 2nd level, long beeps will sound and red LED II will go off.

The output relay reacts depending on the REL jumper setting.

Warning - in the case of a gas alarm stay calm and act as follows: - do not operate any switches

- do not use any kind of phone in the location of the gas leakage

- open any windows

- stop the gas leakage if possible or leave the place and call the gas supply company

Warning – leaking gas can be smelled before the detector detects an alarm-level concentration of gas. In this case, the cause of the gas leak should be eliminated immediately.

Maintenance and testing

Keep the detector clean, it is important that its grids should not be blocked with dust.

Use a gas cigarette lighter without the flame lit, to test the gas detector's reaction. The detector will react within 15 seconds.

Professional recalibration of the detector should be done at least once a year. Contact your distributor for more details.

LED indicators		
Green	• **OFF** • **Flashes** • **ON**	The detector is off Warming up Ready for gas alarms
Red I.	• **ON**	1st level of the gas concentration
Red II.	• **ON**	2nd level of the gas concentration
Red II. **Green**	• **Alternating flashes**	Error in the sensor

Specification:

Sensitivity (gas concentration):

	Methane	***Propane***
Level 1	*10±3 % LEL (0.44 % vol.conc.)*	*18±3 % LEL (0.30 % vol. conc.)*
Level 2	*18±3 % LEL (0.80 % vol. conc.)*	*30±3 % LEL (0.50 % vol. conc.)*

	Iso-butane	***Hydrogene***
Level 1	*23±3 % LEL (0.30 % vol. conc.)*	*9±3 % LEL (0,36 % vol. conc.)*
Level 2	*40±3 % LEL (0.50 % vol. conc.)*	*16±3 % LEL (0,66 % vol. conc.)*

LEL = Lower Explosive Limit (100 %) according to EN 60079-20-1: for methane 4,4 % vol. conc., for prophane 1,7 % vol. conc., for iso-buthane 1,3 % vol. conc., for hydrogene 4,1 % vol. conc., calibrated by iso-butane

Power supply	*230 V / 50 Hz, 2 W, protection class II*
Detection method	*hot platinum filament*
Buzzer sound level	*94 dB / 0.3 m*
Relay output	*optional for 1st or 2nd level, max. 230 V AC / 5 A*
Alarm memory	*selectable*
Response time	*20 s*
Warm up time	*approximately 90 s*
Working environment	*indoor use, -10 to +40°C, IP30*
Working humidity	*max 80 %*
Designed to operate at normal atmospheric pressure	*86 to 106 kPa*
Equipment according to EN 50194-1	*type A*
Complies with	*EN 60079-29-1, EN 50130-4, EN 55022, EN 60950-1*

For non-explosive areas.

Certified by VVUÚ corp., certificated body No. 3076, by FTZÚ corp., certificated body No. 3051

JABLOTRON ALARMS a.s. hereby declares that the GS-130 is in a compliance with the relevant Union harmonisation legislation: Directives No: 2014/35/EU, 2014/30/EU, 2011/65/EU. The original of the conformity assessment can be found at www.jablotron.com - Section Downloads.

Note: Although this product does not contain any harmful materials we suggest you return the product to the dealer or directly to the producer after use.

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