

JA-60G Wireless Gas Leak Detector

The JA-60G detects all mixtures of air and combustible gas (Natural Gas, Methane, Propane, Butane, Acetylene, GPL, Hydrogen, etc). The detector detects two levels of gas concentration, responding with two different output reactions.

The main detector features are: high reliability and sensitivity, compact size, 230V (110V optional) power supply and long stability & lifetime. It has a built-in transmitter to wirelessly send an alarm signal.

Specification

power supply	230V/50Hz (optionally 110V/60Hz), 2 W
detection method	hot wire type
sensitivity of 1 st level	10 % LEL (calibrated for iso butan)
sensitivity of 2 nd level	20% LEL (calibrated for iso butan)
buzzer sound level	94dB/0.3m
relay output	optional for 1 st or 2 nd level, max.230V/5A
alarm memory	selectable
response time	10 s
warm up time	60 s
working range	max. 50m (open area)
working environment	indoor use, -10 to +40°C, IP30
complies with	EN 60335-1

Installation

- The detector should be installed by a professional.
- Fix the detector on the wall. For gases lighter than air (natural gas, city gas etc.) install it close to the ceiling. For heavier gases (propane, butane, etc.) install it close to the floor.
- The detector should not be located close to any obstacles preventing natural air circulation.

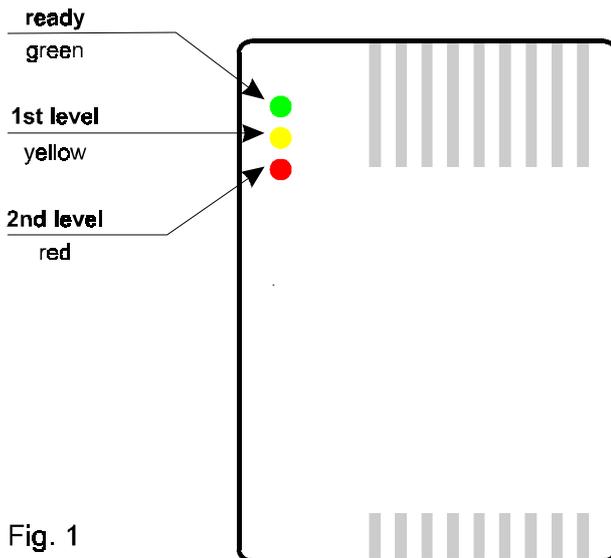


Fig. 1

Output relay function

There is a dry relay contact available on the JA-60G output terminals:

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

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

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.

Note: alarm signal is wirelessly transmitted at the same moment when the detector's relay reacts.

Memory

The memory function is factory default disabled (when the concentration of the gas drops down to normal, the JA-60G 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 JA-60G power supply is terminated for a minimum of 5 seconds.

External buzzer

You can connect an additional buzzer (model BZ-12) to the AUX connector (max. 12V, 20mA). The external sounder works the same way as the built-in one.

Power supply

Route the power cable to the terminals marked 230V AC (or 110V AC). The power inlet should be fused with an external fuse (max. 10A). Study the installation manual of the receiver unit (control panel) to learn how to enter the enrolling mode before switching on the power.

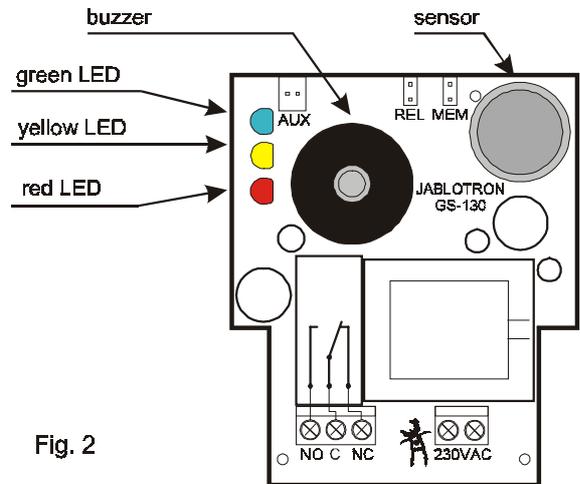


Fig. 2

Function

After switching the power on, the detector will transmit the enrollment signal and the green LED will flash for 60 seconds while 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 the yellow LED will light.

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

The output relay reacts depending on the REL jumper setting. The alarm signal is wirelessly transmitted at the same moment when the detector's relay reacts.

If the red and green LED's are both flashing, the sensor is not able to get valid data.

Warning - In the case of a gas alarm, don't operate any switch or electrical device. Open the windows, and stop the gas leak, if practical. Call the fire department immediately, but do not use a phone inside.

Testing

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