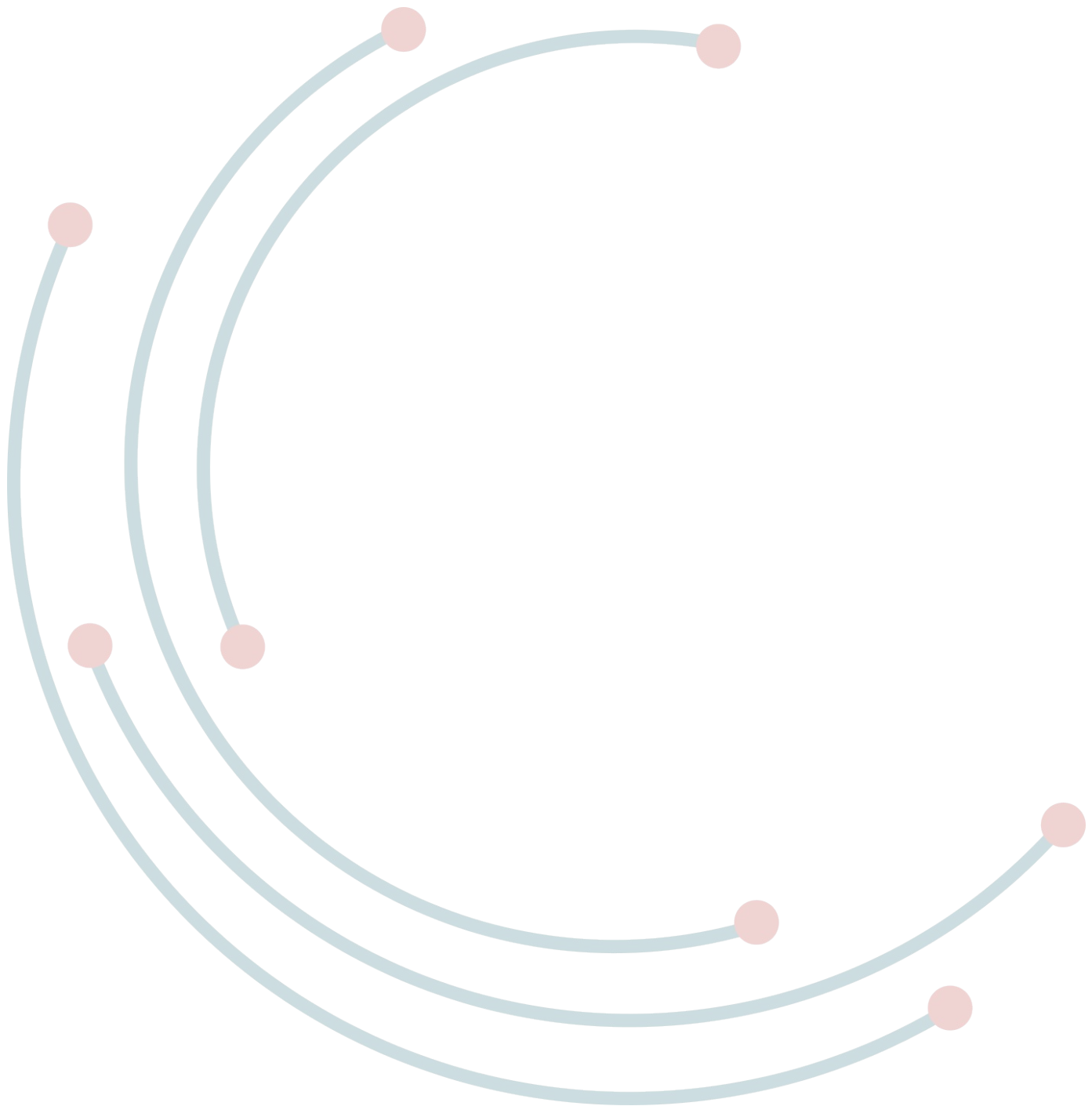




Installation, use and maintenance manual

Domestic gas detector

KR-DTH series



Reading this manual is intended for all those who will be responsible for the installation of the gas detector, as well as its maintenance and use.

The gas detector will only operate as intended if it is installed, maintained and used in accordance with the instructions in this manual. Failure to do so may result in the gas detector not functioning as intended, and persons operating the unit may be seriously or fatally injured.

Only qualified personnel should install the gas detector.

The gas detector described in this manual is intended for the detection of flammable gases. It is considered necessary to adopt all safety procedures required by local regulations before proceeding with the installation of the gas detector or its maintenance procedures.

It is recommended that you contact Krea S.r.l. in order to obtain further information regarding the installation and maintenance of this gas detector.



Risk of electric shock or burns. Keep out of reach of children.

Dangers associated with the improper use of the device. Please follow all the instructions in this manual.

The device may not function as described in this manual if installed under conditions other than those specified, particularly with regard to humidity, temperature, installation in particularly dusty environments, or installation in poorly ventilated areas.

It is absolutely essential to disconnect the power supply before installing or servicing the detector. Please note that this detector is intended for indoor use only.



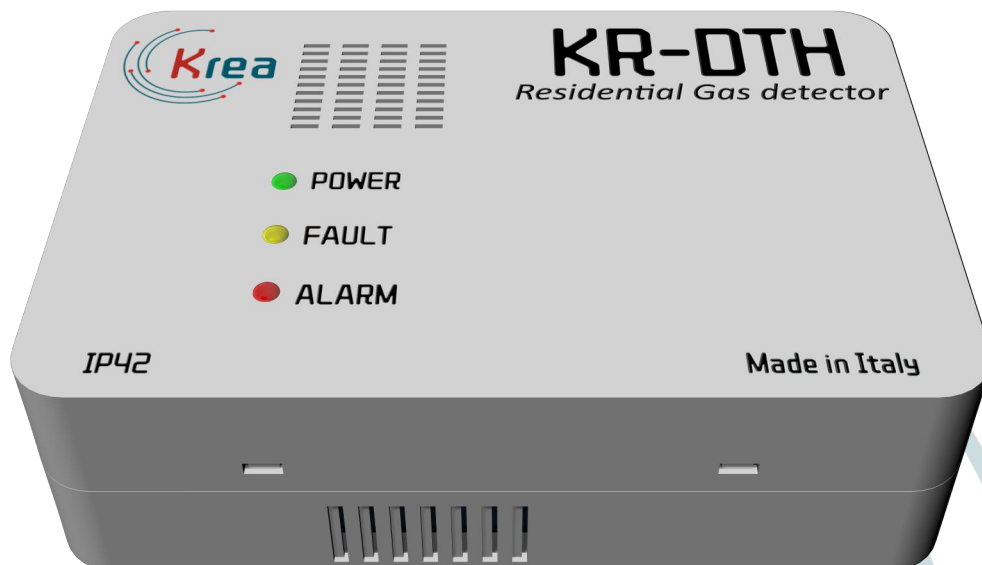
WARNING:
As the **KR-DTH** is an electronic device, it must be disposed of in accordance with the Waste Electrical and Electronic Equipment (WEEE) Directive (Directive 2012/19/EU).

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1.1 Detectors description



The **KR-DTH** sensor is an electronic device designed to detect Methane or LPG gas in domestic environments. Its main function is to promptly detect any gas leaks, helping to prevent situations that could be dangerous for people and property. The device is powered directly by 230 VAC, therefore it does not require external power supplies or batteries. Once connected to the mains, the sensor starts operating and begins continuous monitoring of the environment.

The **KR-DTH** is equipped with:

- High sensitivity gas sensor, calibrated to detect Methane or LPG (depending on the model);
- Integrated acoustic alarm (buzzer) that emits an audible signal when gas is detected;
- Indicator lights (LEDs) for status, fault and alarm signals;
- Output contact for connection to external devices (e.g. solenoid valves, alarm systems).

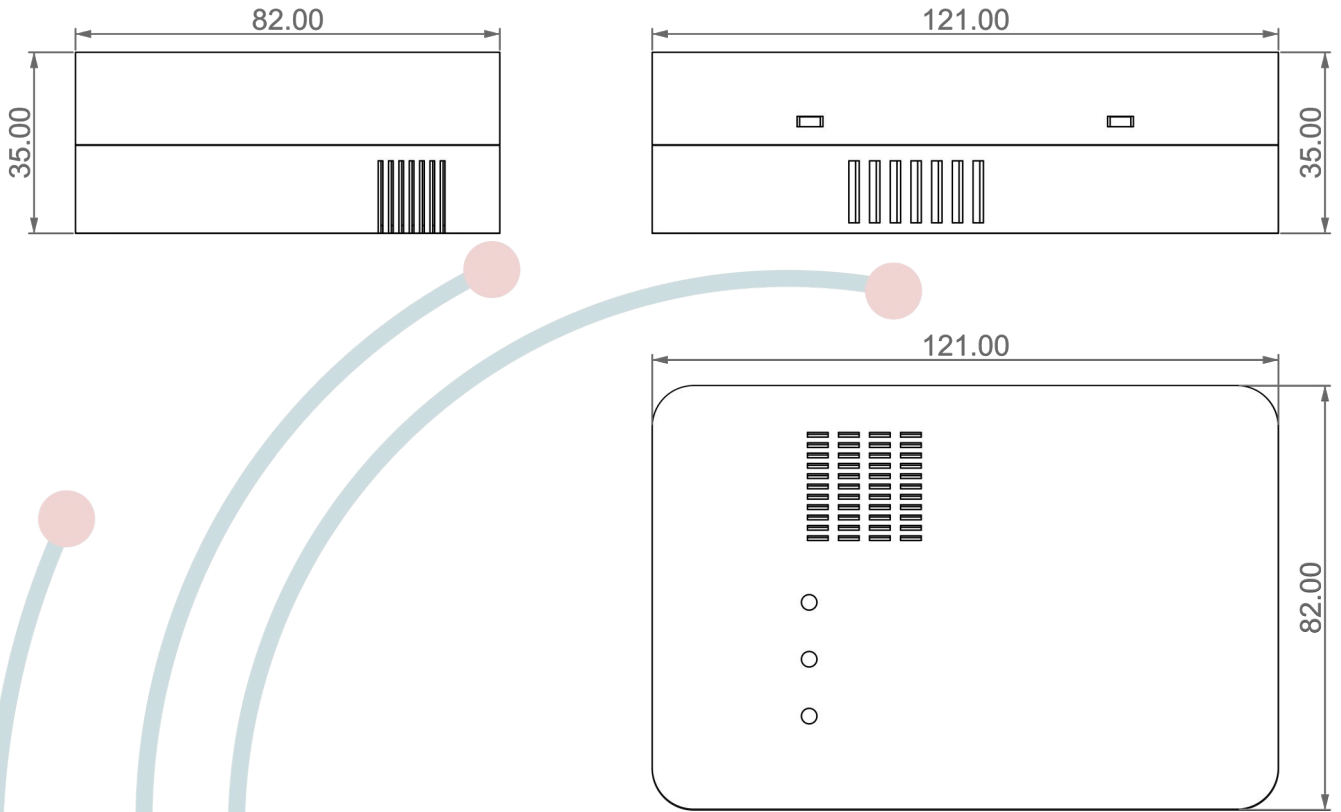
The sensor must be installed in a fixed position, following the instructions provided in the "Installation" section, and must be chosen based on the type of gas to be detected:

- Version for Methane gas: installation in the upper part of the room (Methane is lighter than air);
- Version for LPG: installation in the lower part of the room (LPG is heavier than air).

1.2 Technical data

Power supply	230 Vac \pm 10%
Maximum absorption	50 mA @ 230 Vac
Interface	Relay SPDT 10A clean contacts
Maximum relay load	5 A @ 125Vac; 3 A @ 250 Vac
Sensor technology	Catalytic
Threshold	10% LIE
Weight	200 g
Working temperature	-5°C ~ +60°C
Relative humidity	15 ~ 80% non condensing
Dimensions	121x82x35 mm
Material	ABS autoextinguishing
Protection degree	IP42
Compatibility	EN 50270

1.3 Mechanical dimensions

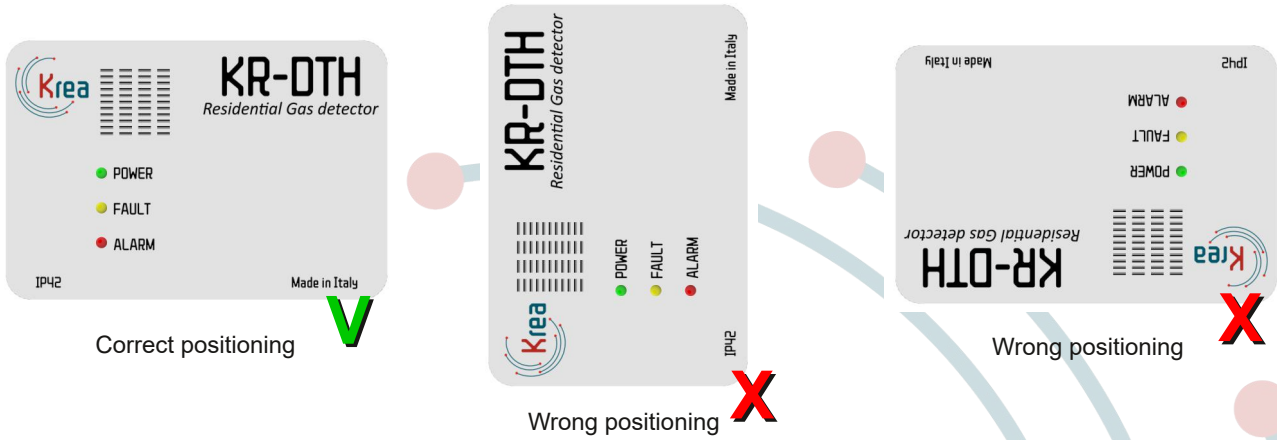


All dimensions are in millimetres.

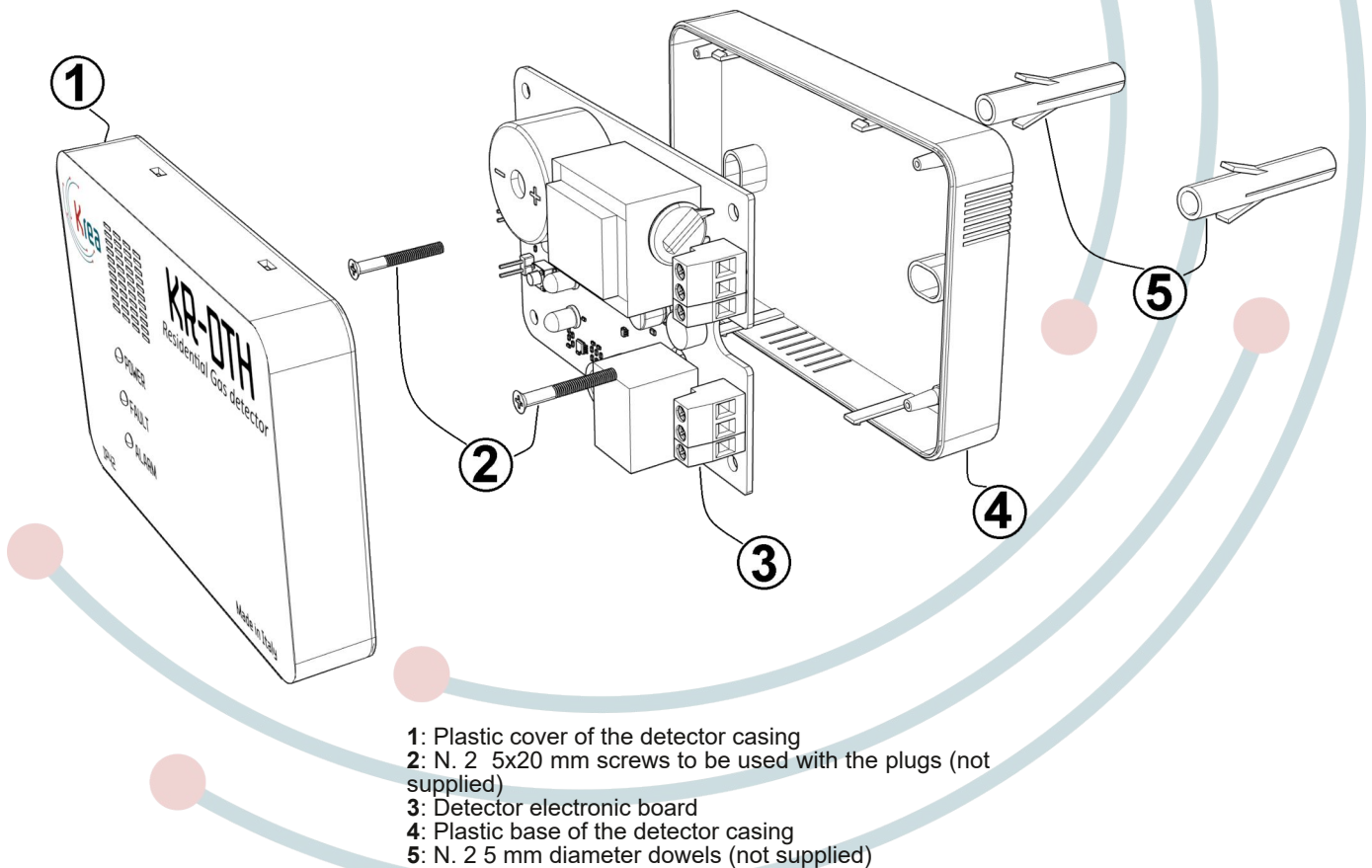
2. Installation

2.1 Installation

The detector must be positioned horizontally, as shown below.

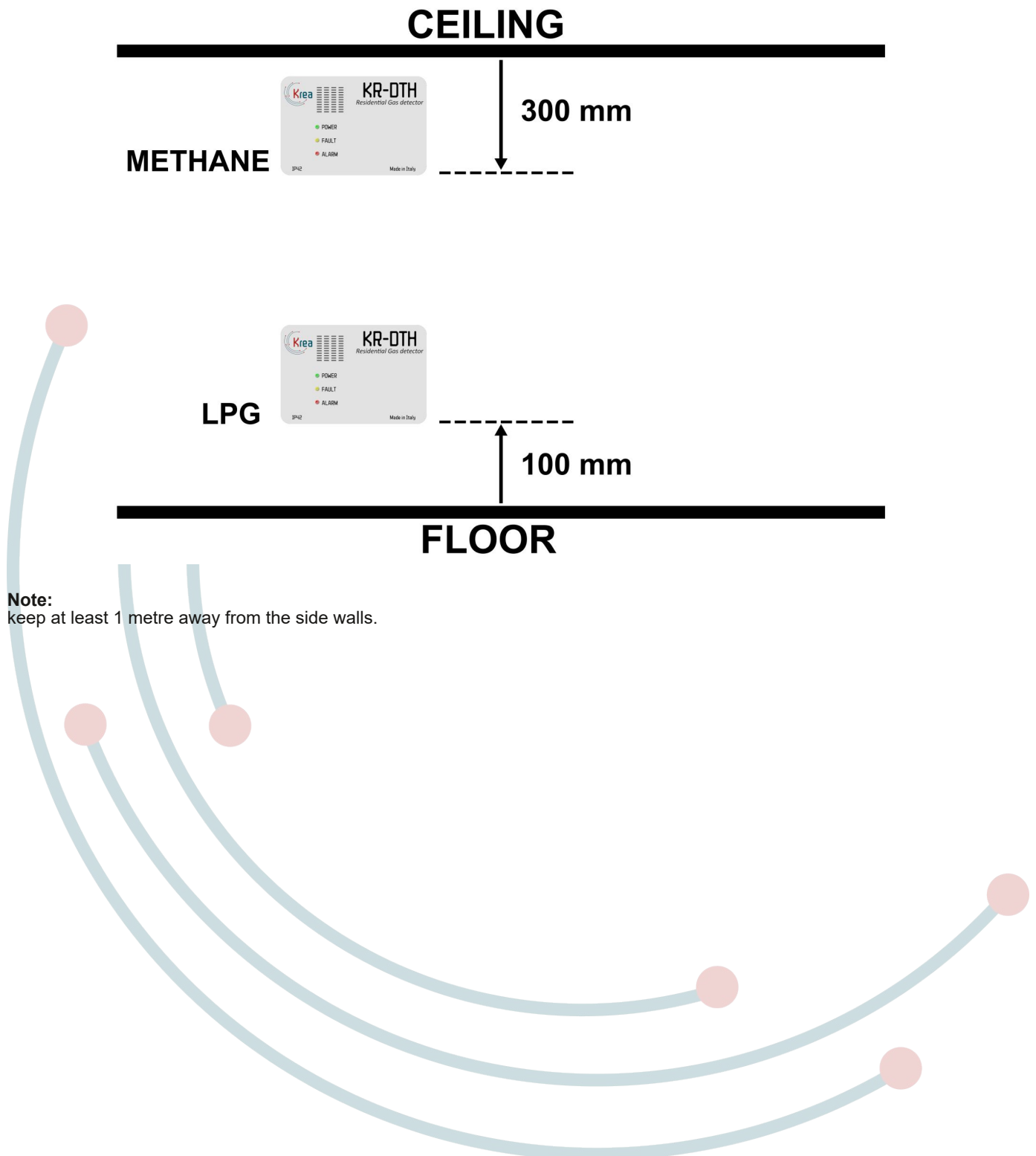


2.2 Wall mount installation



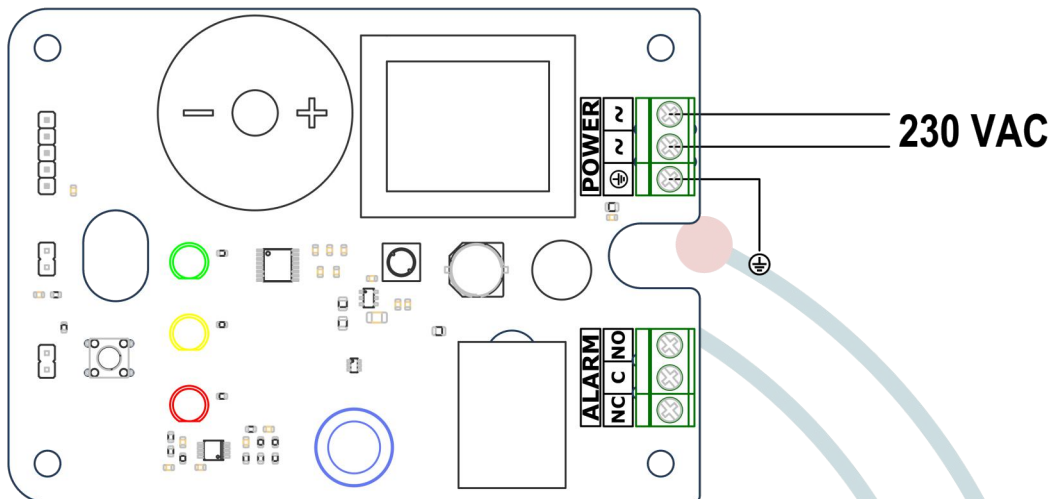
2.3 Detectors placement

Proper positioning of the detector is crucial for achieving correct gas sensitivity. Therefore, the detector cannot be positioned randomly, but at a specific height based on the density of the gas to be monitored (see image below). It is important that the sensor is not exposed to fumes, vapours and/or similar substances that could lead to false detections. Furthermore, it must be positioned away from heat sources, fans or extractors.

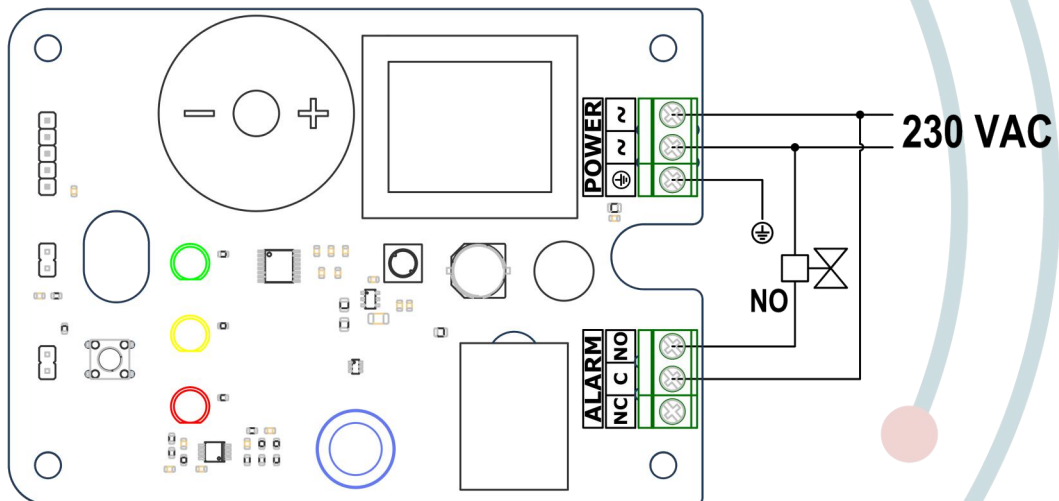


2.4 Connections

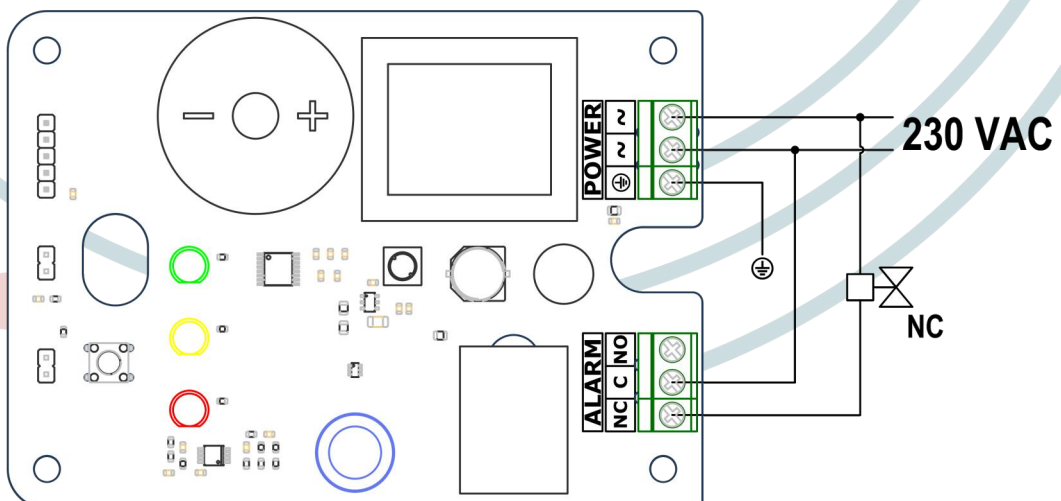
POWER SUPPLY: connections of the 230 VAC power supply to the 'POWER' terminals.



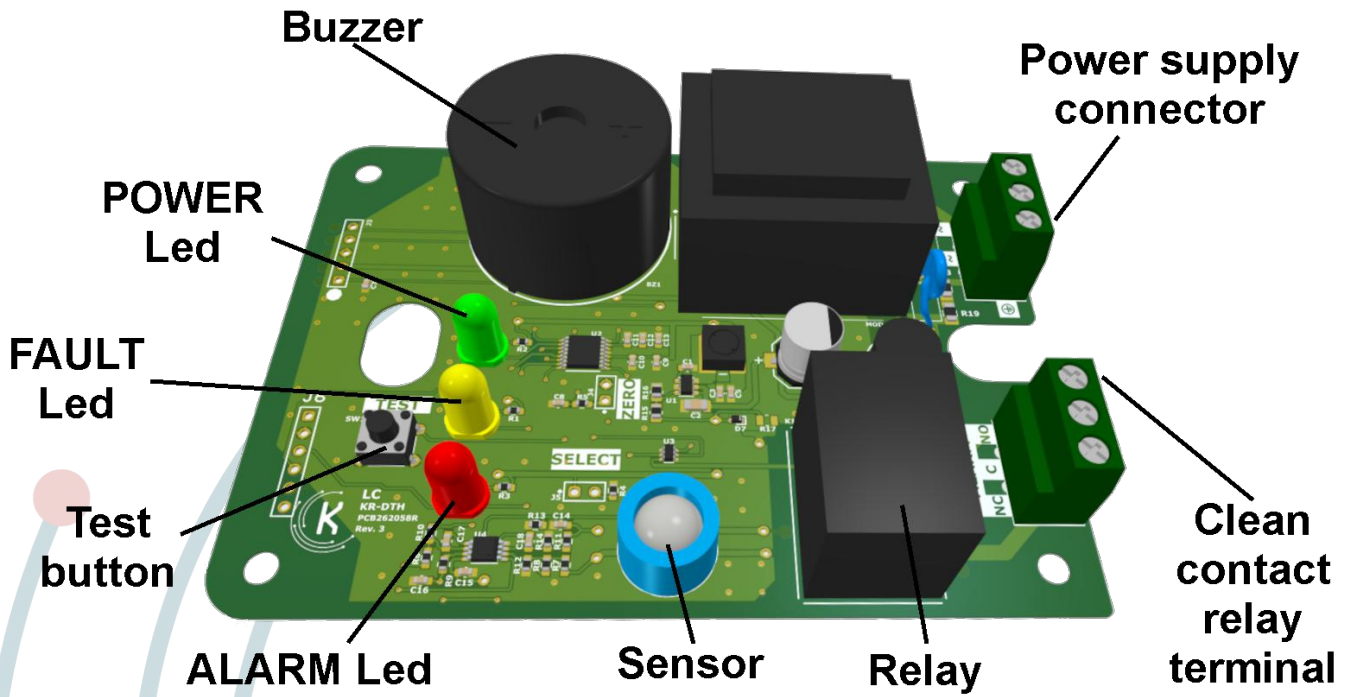
EXAMPLE: connection of the 230 VAC power supply and a NO solenoid valve powered by 230 VAC.



EXAMPLE: connection of the 230 VAC power supply and a NC solenoid valve powered by 230 VAC.



3. Board description



If the yellow LED lights up, the device is faulty and you should contact customer support.

4. Starting/Test/Maintenance

4.1 Starting and Test

Connect the detector to the power supply.

Note: check that the supply voltage is correct as indicated on the detector label and in the manual.

When the device is powered up, the three LEDs (green, yellow and red) light up in sequence; then the green LED flashes intermittently for a period of approximately 90 seconds (this phase is identified as "sensor stabilisation"); subsequently, the green LED will indicate the presence of power with a steady green light.

Pressing the Test button simulates a gas alarm condition. During the test phase, the relay trips, the buzzer sounds and, finally, the red alarm LED lights up.

4.2 Detectors maintenance

The detector must be checked every six months. Perform the Test procedure at the time of inspection.

The sensor's lifespan in clean air is estimated at 5 years.



Warranty

The equipment is guaranteed for a period of 1 year from the date of manufacture, according to the conditions described below. Any components found to be defective will be replaced free of charge. Excluding and replacing plastic or aluminium cases, bags, packaging, any batteries, and data sheets.

The equipment must be returned to the manufacturer carriage paid.

The warranty does not cover failures due to tampering by unauthorised personnel, as well as faulty installations or carelessness resulting from phenomena unrelated to the normal operation of the equipment.

No liability shall be accepted for any damage, direct or indirect, caused to persons, animals or things, due to failure of the product or the forced suspension of its use.

