





# **Conventional Gas Detector**



Part No. 13100

# **METHANE (NATURAL GAS) DETECTOR**

To avoid personal safety injury, instrument damage and potential dangerous accident; do not use the product before reading this manual.

13100 Methane (Natural gas) detector is kind of Wall-mounted household gas alarm designed to detect the concentration of combustible gases using high quality air-sensitive component and manufactured with advanced technology. It provides visual and audible signals. This product included three different colours led indicators; the green led for "POWER", the red led for "ALARM" and the yellow led for "MAINTNANC".

13100 gas detector has an "A" type (ALARM + Relay output) and a certificate of conformity to Turkish standards TS-EN 50194.

Relay contact can be used with 2 functions (Normally opened – Normally closed). Can be controlled a Solenoid valve or any other device.

| SPECIFICATION        |   |  |
|----------------------|---|--|
| Operation Voltage    | 230 - 240V / 50Hz                         |  |
| Operation Current    | 10mA (stand by) – 20mA(alarm)             |  |
| Operation Conditions | Temperature 0-50°C<br>Humidity: <%95      |  |
| Alarm level          | 5000 ppm (%0.5)                           |  |
| Alarming method      | Visual and audible signals & relay output |  |
| Sound level          | ≥85dB                                     |  |
| Relay output         | 10A 250V AC<br>5A 100V DC                 |  |
| Dimension            | 125mmx60mmx50mm                           |  |
| Protective class     | IP20                                      |  |
| Warranty             | 2 years                                   |  |

#### MOUNTING AND USING INSTRUCTIONS

Fix the appliance on the wall at a horizontal distance as 1 - 2 meters from the cooker or gas source and vertical location should be fix within 0.05 - 0.15 meters below the roof. This product applies to a fixed power cable system ( $2x1/5 \text{ mm}^2 \text{ NYM cable}$ )

Such location should be avoided:

- Covered by other things,
- Directly under the washbasin,
- Near the doors & windows or passage with strong wind,
- Easy polluted or high temperature environment near oven,
- Water fog and drop or such moist place.

Do not use the product at cross purpose

Using 230 - 240V voltage so dangerous that only the specialist electricians must install and apply.

• This product will be activated in 30 sec. after it is energized.

#### **STATE OF ALERT**

If the gas in environment rises above the pre-set alarm level, the appliance will enter alarm status, the red ALARM light will shine and the buzzer will give sound alarming. Meanwhile the alarm will activate the relay output;

Please calm down and do the following instructions.

- At the same time, put out of the fire and all flame out,
- Please cut off main gas supply and shut off the gas valve promptly
- Check the leakage source.
- Don't try to switch on or off any electric appliance, including mobile phone and such communications tools,
- Open the windows and door for rising airconditioning
- Ask professional person to eliminate the gas leaking malfunction quickly.
- Please do not call using the phone in the same building.

After re-installation if the ALARM status still continues and the gas leaking source could not be found please leave the building as soon as possible and call the gas supplier firm and / or 24 hours` open gas service line.

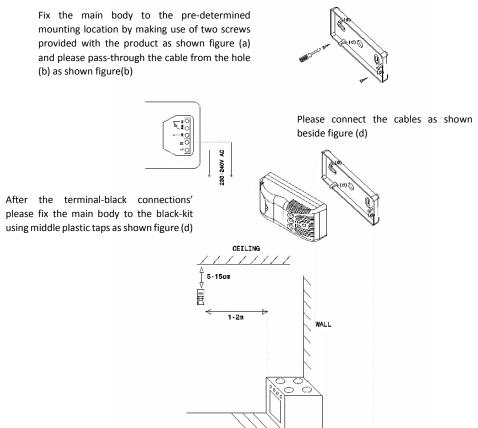
If the ALARM status is over, please be sure the leakage source is certainly off and then turn the main gas supply back to previous position.

#### **WARNING**

- 13100 Method (Natural gas) detectors do not detect at the first operating in 3 minutes.
- After 3 minutes in 3 minutes warming time the appliance will be ready for the operation. In the meantime, only green POWER led will shine and show us the system is working.

- If the yellow MAINTENANCE alarm light is on, it shows there is something wrong with the detector and the detector can't detect gas. Then please contact the distributor.
- The red ALARM led and buzzer can be controlled working or not-working by using test button on the detector.
  - 13100 Methane (Natural gas) detectors calibrate themselves periodically so that it achieved constant sense level.
  - Please do not use some non-calibrated gas to test the detectors, if the gas concentration is too high, it will damage the detectors, also is harmful for human's health
  - When the electricity cut off, the gas detector does not operate.
  - 13100 Methane (Natural gas) detectors must be tested twice a year. How do you test it? Please just give some of gas to the appliance with the lighter gas when the green led is on (system is working) during 1 minute. If the appliance starts to alert, test passed positively.
    - Clean the dust or dirt on the alarm frequently to keep air vent freely and the lights clear.

## **MOUTING**



## **TROUBLESHOOTING**

| Problem                                     | Cause   | Solution   |
|---|---|--|
| Green POWER Light is off                    | Plug connection is not correct it is unplugged                        | Plug in again                                    |
|   | Light broken  | Contact with the distributor                     |
| Press test button without alarm sound       | Circuit fault   | Contact with the distributor                     |
| The gas cannot detect                       | The preheat is not finished   | Wait unit the preheat ready                      |
|   | Circuit fault   | Contact the distributer                          |
| Red led ALARM light is on after the warm up | Too much smoke, alcohol or perfume or other volatility gas in the air | Move the clean air and test again                |
|   | Stored too long   | Warm up form more than 2 hours                   |
|   | Circuit fault   | Contact with the distributor or factory maintain |

# **Natural Gas: Methane**

| Gas         | Basis           | Exploding Range |
|-------------|-----------------|-----------------|
| Natural Gas | CH <sub>4</sub> | 5% ~ 15%        |

LEL: Lowest Explode Level, that is the lowest concentration of the gas in the air, which will cause exploding when meeting with fire.