Honeywell GAS DETECTOR

Overview

The autonomous gas sensor (hereinafter referred to as the sensor) is a home device for detecting a leak of natural gas (the main component is methane), which, in the case of determining a high concentration of combustible gas (methane) in the room, produces a light-sound alarm or sends a warning message to the connected device.

Accessories

- Alarm x1
- Mounting plate x1
- Battery x1
- The instruction x1
- Plug dowel x2
- Screw x2
- Double-sided adhesive tape x2

Setup instructions

1. Connection terminal, output signal and device connection

<table>
<thead>
<tr>
<th>Number</th>
<th>A useful clamping</th>
<th>Output signal</th>
<th>Connected devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>T+, T-</td>
<td>Condenser bottle</td>
<td>12V-impulse electromagnet valve</td>
</tr>
<tr>
<td>2</td>
<td>COM, NO</td>
<td>Normally open contact</td>
<td>Output fan</td>
</tr>
</tbody>
</table>

* Even if the connection terminal is not connected to the device, the sensor will still function.
* If you need to connect an electromagnetic solenoid valve or an output fan to the wiring, please ask your dealer for assistance.
Installation

1. Fastening with screws
   a) Insert the battery into the battery compartment, press and hold the «Sound / Self-check» button for 1 second. Make sure that the red-yellow indicator starts flashing on the device, after which you will hear a corresponding beep.
   b) Drill holes in the ceiling with a perforator;
   c) Insert the dowels;
   d) Using self-tapping screws, attach the mounting plate;
   e) Attach the main alarm panel to the mounting panel in accordance with all the index marks, go clockwise until you hear a characteristic click that indicates the fixation of the device.

   Using self-tapping screws, install the mounting plate.
   Attach the main alarm panel to the mounting panel in accordance with all the indicia.
   Turn clockwise until it clicks.

2. Mounting with adhesive tape
   a) Insert the battery into the battery compartment, press and hold the «Sound / Self-check» button for 1 second. Make sure that the red-yellow indicator starts flashing on the device, after which you will hear a corresponding sound signal
   b) Remove the protective film from one side of the adhesive tape and attach it to the back of the mounting panel;
   c) Remove the protective film from the other side of the adhesive tape and attach
   d) Attach the main alarm panel to the mounting panel in accordance with all the reference marks, go clockwise until you hear a characteristic click that indicates the fixation of the device.

   Precautions for installation
   a. Install the device in the premises where the gas (methane) is conducted;
   b. Avoid places outside the premises;
   c. Avoid rooms with a temperature below -10 °C or above 55 °C;
   d. Avoid places near other devices, that produce hot air, water vapor or soot (for example, directly above the gas stove);
   e. There should be no barrier between the sensor and the gas equipment, otherwise the sensor will not be able to measure the gas concentration level;
   f. Avoid places at the hood, windows, entrance doors and other well-ventilated places, otherwise the sensor will not have contact with the gas and will not be able to measure its concentration level;
   g. Make sure all sockets are plugged in;
   h. It is recommended to perform the installation with screws, in the case of installation with adhesive tape, unforeseen situations may occur, the user is responsible for;
   i. If installed with adhesive tape, make sure that the selected surface for attaching the device is smooth, smooth, clean and dry;
   j. If installed with adhesive tape, it is necessary to regularly check the reliability of the fastening to prevent the sensor from falling.
Selecting an installation location

Wall mounting: the distance between the gas sensor and the gas equipment or valve should not be more than 4 meters, the distance from the sensor installation to the ceiling should be less than 0.3 meters, but do not install the sensor directly above the gas equipment. Below is a schematic drawing that will help you choose the right location for the device.

Ceiling installation

The distance between the gas sensor and the gas equipment or valve should not be more than 4 meters, do not install the sensor directly above the gas equipment. Below is a schematic drawing that will help you choose the right location for the device.

Using

1. Power supply for preheating

Before switching on the power, make sure that the power source is operating properly; Connect the device to the power supply - the buzzer sounds three times, after which the red, yellow, green indicator flashes in turn. After about five minutes, one long beep will sound, indicating the exit from the preheating mode, the green indicator will light up.

* When using for the first time, or if the device has not been used for a long time, please connect the sensor to the power supply for 72 hours for further optimal operation of the device.

2. Normal working status

In the absence of malfunctions or an alarm, the green indicator is constantly on; when the «Sound / Self-diagnosis» button is pressed, the sensor switches to the self-test mode (once in a row the red, yellow, green indicator flashes, and the alarm sounds once). After completion of self-diagnosis, the sensor restores normal
3. **Alarm**

If the device has no faults, but as a result of exceeding the permissible level of gas concentration in the room, the audible alarm turns on, the red indicator lights up, and the signal sounds. To turn off the signal, press the «Sound / Self-Diagnosis» button, and after about 70 seconds the device will resume its operation.

If the gas concentration level is below the maximum permissible value of the sensor, it automatically switches to normal operation. If other devices are connected to the sensor, it is necessary to confirm the elimination of a hazardous situation and restore the gas supply. Reconnect the devices according to the recommendations in the operating instructions.

4. **Fault status**

In case of a malfunction, the yellow indicator lights up and a beep sounds, and two beeps sound every 5 seconds. You can press the «Sound / Self-Diagnosis» button, after 12 hours the audible alarm will turn on again.

5. **Duplicate a signal on another device**

If the sensor is operating in normal mode, press and hold the «Sound / Self-Diagnosis» button for 3 seconds to enter the signal duplication mode. In this case, the red indicator will light up, a continuous loud beep will turn on. If you press and hold the «Sound / Self-Diagnosis» button for 11 seconds, an alarm is output to the connected device. If you release the button, you immediately exit the signal duplication mode.

### Main parameters

<table>
<thead>
<tr>
<th>Name of good</th>
<th>Independent gas sensor with a range of measurements 0 – 100% LEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>JTQJ-BF-01LM/BW</td>
</tr>
<tr>
<td>Determination of gas type</td>
<td>methane</td>
</tr>
<tr>
<td>Limit value</td>
<td>4% LEL</td>
</tr>
<tr>
<td>Alarm mode</td>
<td>light alarm system</td>
</tr>
<tr>
<td>Input voltage</td>
<td>Adapter: 100-240V – 0.2A Max, Sensor: 12V = 70mA</td>
</tr>
<tr>
<td>Capacity</td>
<td>0.9W</td>
</tr>
<tr>
<td>Response time</td>
<td>&lt;30 seconds</td>
</tr>
<tr>
<td>Use environment</td>
<td>Temperature: -10 °C ~ + 55 °C, relative humidity: &lt;93% RH</td>
</tr>
<tr>
<td>Size</td>
<td>F 80mm x 29mm (with mounting plate)</td>
</tr>
<tr>
<td>Weight</td>
<td>90g</td>
</tr>
<tr>
<td>Installation method</td>
<td>Installation of wall or ceiling type, there are two outputs for connecting the contacts of the corresponding connector</td>
</tr>
<tr>
<td>Output power</td>
<td>250V ~ 2A, 30V-2A</td>
</tr>
<tr>
<td>Standard</td>
<td>GB 15322.2-2003</td>
</tr>
</tbody>
</table>

### Maintenance

To ensure normal operation of the sensor, perform maintenance on the device following the following recommendations:

1. Install, use and maintain the sensor, following the recommendations in the manual;
2. It is recommended to perform a self-diagnosis of the device once a month: press the «Sound / Self-diagnosis» button, make sure that the sensor is functioning normally;
3. It is recommended to wipe the external surface of the device every season, clean the air intake openings from dust and grease, make sure that the sensor holes have good entrance patency, and the alarm system works properly. To clean the device use a dry towel, do not use alcohol, chemical, other abrasives or too wet a towel.
4. It is recommended to calibrate once a year.

Calibration should be performed by qualified organizations. Do not perform a calibration yourself.
**Cautions**

1. This sensor is used only for pipeline gas (methane), cannot be used to determine liquefied gas in cylinders;
2. It is forbidden to make changes of the internal structure of the device;
3. Do not directly expose the highly concentrated flammable gas to the sensor (e.g., lighter gas, clean natural gas, etc.), this may result in a partial / total reduction in the sensitivity of the sensor or its damage;
4. Avoid a large number of solid aerosols, insecticides, paints, glues, solvents and other similar substances near the sensor. This can provoke a false alarm and adversely affect the life of the device;
5. The operating life of the internal sensor is 5 years. Please pay attention to the service life of the device and perform timely maintenance or replacement of necessary elements;
6. Regularly pay attention to the work of the sensor. In case of a malfunction, do not disassemble the device yourself. It is necessary to contact the store or the manufacturer in a timely manner and describe in detail the signs of the problem so that the after-sales service representative can advise you. If the product needs to be returned to the factory for maintenance, adhere to the safety practices when using gas.

**Rights and responsibilities of the company**

1. This manual contains a detailed description of the rules for using the device, its technical parameters and other information, but the company reserves the right to make changes to the manual without further notice;
2. The shown sensor may be slightly different from the actual device, the actual appearance of the product prevails;
3. This information is intended only for familiarization, it is not a form of obligation;
4. All rights reserved, the company reserves all rights. No part of this manual may be reproduced in full or in part, copied by any organization or person without prior written consent and should not be distributed in any form.

**Faults and troubleshooting**

<table>
<thead>
<tr>
<th>Symptoms of a malfunction</th>
<th>Troubleshooting</th>
<th>Debug</th>
</tr>
</thead>
<tbody>
<tr>
<td>The indicator light does not turn on</td>
<td>Poor contact with the power source</td>
<td>Make sure you have a good contact with the power source, contact the store or the manufacturer.</td>
</tr>
<tr>
<td>Problems with the connected device</td>
<td>Indicator failure</td>
<td>Ensure that there is a good contact with the power source, check the connected device, contact the store or manufacturer for maintenance</td>
</tr>
<tr>
<td>The yellow indicator light</td>
<td>Other reasons</td>
<td>Contact the store or the manufacturer for maintenance</td>
</tr>
<tr>
<td>No response of the sensor to detection / increased level of gas concentration</td>
<td>Poor cable contact or improper connection</td>
<td>Contact the store or the manufacturer for maintenance</td>
</tr>
<tr>
<td>No sound signal</td>
<td>Mismatch of the sensor alarm type with the connected device</td>
<td>Contact the store or the manufacturer for maintenance</td>
</tr>
<tr>
<td>New repair in the house, alarm activation</td>
<td>Damaged solenoid valve</td>
<td>Try to move the sensor to clean air and check if the alarm goes off</td>
</tr>
<tr>
<td>The red light is constantly on</td>
<td>Sensor malfunction</td>
<td>Check if there was a gas leak, move the device to clean air for 48 hours to restore normal operation of the sensor</td>
</tr>
<tr>
<td>Alarm activation for each gas use</td>
<td>Other reasons</td>
<td>Contact the store or the manufacturer for maintenance</td>
</tr>
<tr>
<td>Other reasons</td>
<td>Sensor malfunction</td>
<td>Contact the store or the manufacturer for maintenance</td>
</tr>
</tbody>
</table>
**Actions on gas leakage**

1. When the alarm is on, do not turn on any electrical appliances;
2. It is forbidden to disconnect the sensor from the power source, it can automatically close the solenoid valve and turn on the fan (if it is);
3. It is necessary to disconnect all sources of fire, close the gas valve;
4. It is necessary to open windows and doors for ventilation of the room.

The presence of hazardous and noxious substances

<table>
<thead>
<tr>
<th>Substance</th>
<th>(Pb)</th>
<th>(Hg)</th>
<th>(Cd)</th>
<th>(Pb(V)I)</th>
<th>(PBB)</th>
<th>(PBDE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>adhesive tape</td>
<td></td>
<td>☐</td>
<td>☐</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>hard plastic</td>
<td>☐</td>
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<td>☐</td>
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<td>☐</td>
<td>☐</td>
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<tr>
<td>screws</td>
<td>☐</td>
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<tr>
<td>circuit board</td>
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</tbody>
</table>

These tables are provided in accordance with SJ/T 11364.
A: Toxic and harmful substances in all components of this device are contained in an amount below the threshold value according to the standard GB/T 26572.
X: the presence of toxic and noxious substances in at least one of the components of this device in an amount exceeding the threshold value, according to GB/T 26572.

**Warranty**

Warranty service is carried out in accordance with the law on «Consumer Rights» and «Product Quality Law». Warranty service includes:

1. Within 7 days from the date of purchase, in case of a problem with the «Fault list», the Xiaomi Service Center determines the cause of the problem, after which you can choose a free replacement of the goods, return or repair.
2. Within 8-15 days from the date of purchase, in case of a problem with the «Fault list», the Xiaomi Service Center identifies the problem, after which you choose a free replacement of the product or service.
3. Within 12 months from the date of purchase, in case of a problem with the «Fault List», the Xiaomi Service Center determines the problem, after which you are provided with free repair.

**Conditions, that are not covered by warranty service**

1. Maintenance of the device in unauthorized service centers, improper use, falls, negligence, abuse, water affects, accident, damage to the label and labeling of the device;
2. The warranty has expired;
3. Damage caused by force majeure;
4. Breakdowns, that do not correspond to the «List of faults» of the Xiaomi service center;
5. Breakdown of the device from the «Fault List», which arose in connection with the human factor and prevent its normal operation.