

Package Contents

1 × Gas detector

1 × Bag with mounting accessories

2 × Heat-shrink tubing for cable insulation

1 × User Manual

General

The BS-694 and BS-695 explosive gas detectors are designed to provide immediate warning in the event of a Liquefied Petroleum Gas (LPG) or Natural Gas (Methane) leak, respectively, as well as in the event of a mains power failure. The installation of the device shall be carried out only by qualified personnel after carefully reading this instruction manual.

In the event of an alarm or gas leak, remain calm and immediately follow the instructions below:

- Extinguish all naked flames and smoking materials.
- Switch off all gas appliances (cookers, boilers, hobs, etc.).
- Close the main gas shut-off valve or the LPG cylinder valve.
- Immediately open all doors and windows to fully ventilate the area.

Do NOT:

- Operate electrical switches, electrical appliances, or the gas detector itself.
- Use any telephone (fixed-line or mobile) within the affected area.

Important: If the alarm remains active after ventilation, immediately evacuate the building and contact your gas supplier or the Fire Service from a safe location.

Detection Sensitivity

- BS-694 (LPG) - The detector activates when the concentration of LPG (propane or butane) exceeds 5%–15% of the Lower Explosive Limit (L.E.L.) within the protected area.
- BS-695 (Natural Gas / Methane) - The detector activates when the methane concentration exceeds 5%–15% of the Lower Explosive Limit (L.E.L.) within the protected area.The same detector may also be used for the detection of alcohol vapours.

Power Supply

The detectors operate either:directly from the 230 V AC mains supply, or from an external gas detection control panel.

Alarm Operation

When the sensor detects gas, the following actions occur simultaneously:

- The built-in audible alarm (buzzer) is activated.
- The relay output is energized to control the gas shut-off valve.
- An alarm signal is transmitted to the gas detection control panel.

Alarm Reset

The alarm condition is cleared automatically when the gas concentration falls below the alarm threshold (5%–15% L.E.L.), or manually by pressing the TEST button.The gas shut-off valve must always be reset manually.

Functional Test (TEST Button)

Pressing the TEST button performs a functional test and system reset. During the test, the detector's internal circuits are checked, the relay output is activated, the gas shut-off valve closes (if connected), and the built-in buzzer is activated. In addition, the TEST function clears all stored faults and alarm conditions, regardless of whether they have been resolved or are still present at the time of the test. Once the test is complete, the gas shut-off valve must be reset manually.

WARNING!

- Do not test the detector using gas from a cigarette lighter. Direct exposure to high gas concentrations may permanently damage or destroy the sensing element.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children unless they are older than 8 and supervised.
- Installation of the device shall be carried out only by qualified personnel.
- Double-insulated cable shall be used for the power supply and connection of the device terminals.If single-insulated conductors are used, each conductor must be insulated using the heat-shrink tubing supplied with the detector to ensure the required level of electrical insulation and safety.

LED Status Indications

Green	Yellow	Red	Description
●	∅	∅	Normal operation
●	∅	∅	The detector has just been powered on. The sensor is stabilizing (gas detection is disabled during this period).
∅	∅	●	Alarm condition.
∅	∅	●	A gas leak was detected and has now been cleared. Press the TEST button to reset the detector.
∅	●	∅	Sensor fault or sensor disconnected. Service by qualified personnel is required.
∅	●	∅	A fault was detected but has now been cleared. Press the TEST button to reset the detector.

Note:

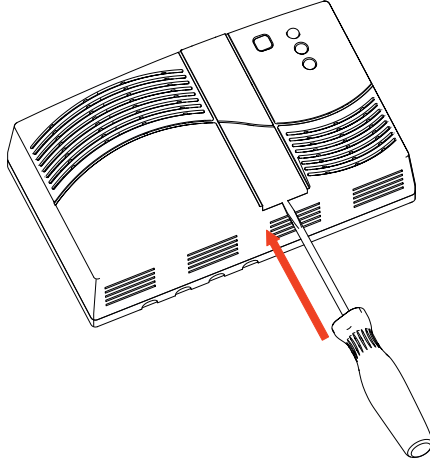
● Steady ON

● Flashing

○ Off

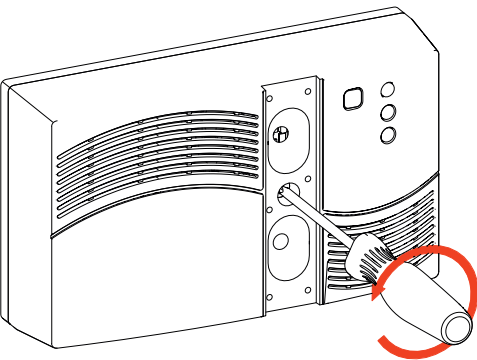
∅ Not applicable (Don't care)

Installation Instructions



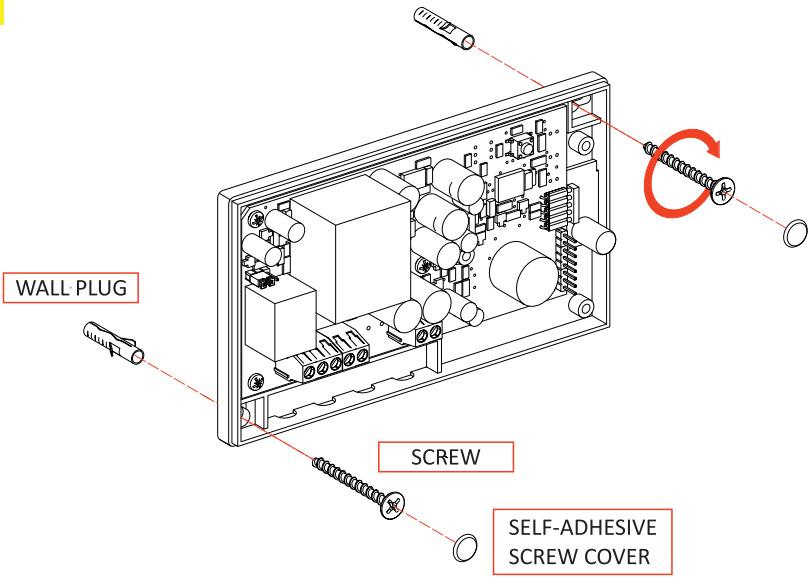
Use a flat-blade screwdriver to remove the protective cover and gain access to the screw securing the two plastic parts.

1



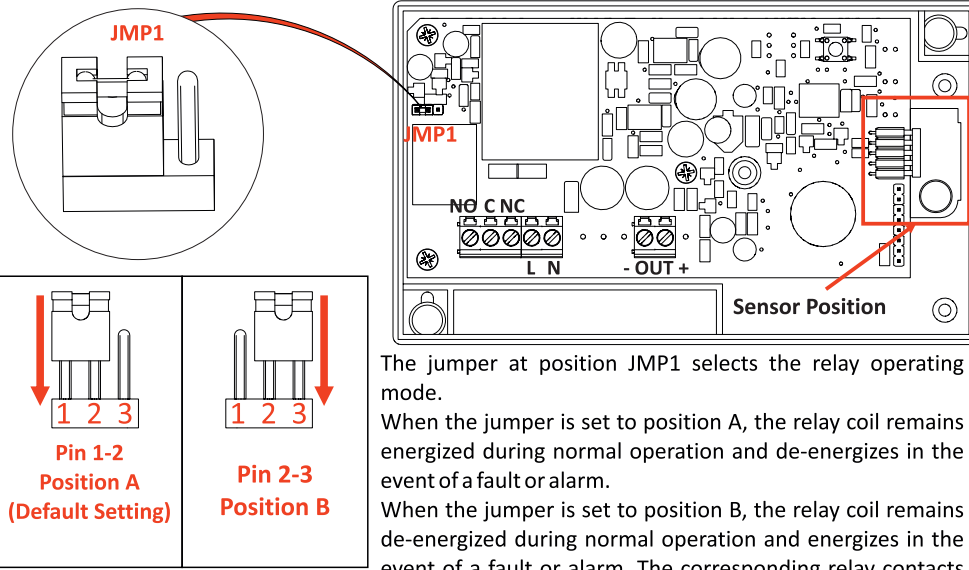
Loosen the screw securing the cover and remove the cover from the device.

2



Secure the detector base using suitable fixing hardware. After installing the screws, apply the two self-adhesive screw covers included in the package.

3



The jumper at position JMP1 selects the relay operating mode. When the jumper is set to position A, the relay coil remains energized during normal operation and de-energizes in the event of a fault or alarm. When the jumper is set to position B, the relay coil remains de-energized during normal operation and energizes in the event of a fault or alarm. The corresponding relay contacts operate as NO (Normally Open) or NC (Normally Closed) according to the selected mode.

4

Connections

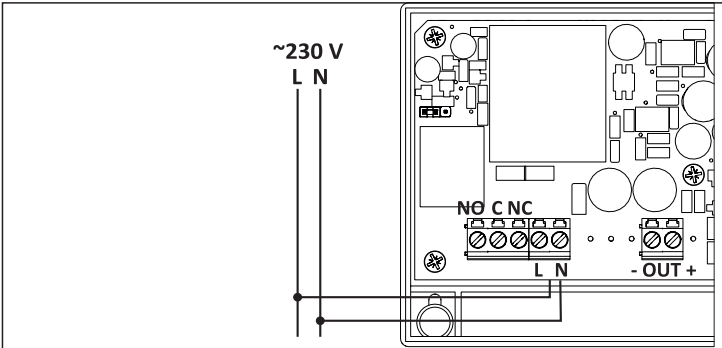


Figure 1. Power Supply Connection Diagram

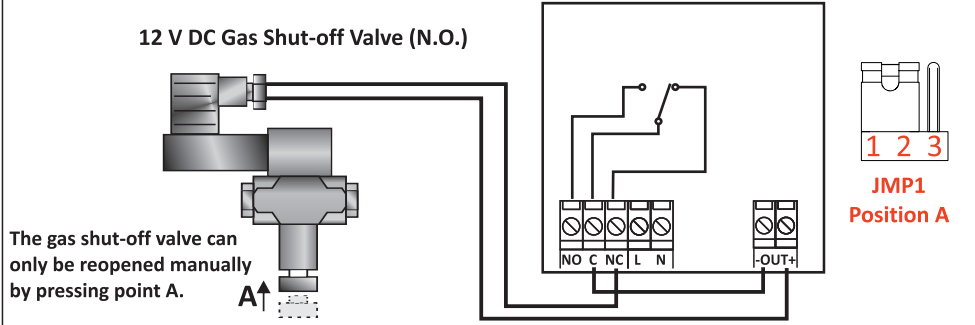


Figure 2. Connection Diagram for a Normally Open (N.O.) Manual Reset Gas Shut-off Valve

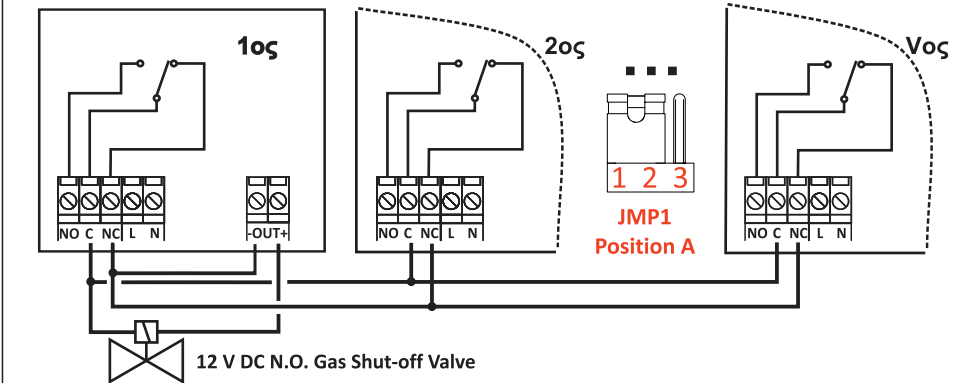


Figure 3. Wiring Diagram for Multiple Gas Detectors with a Single 12 V DC N.O. Gas Shut-off Valve

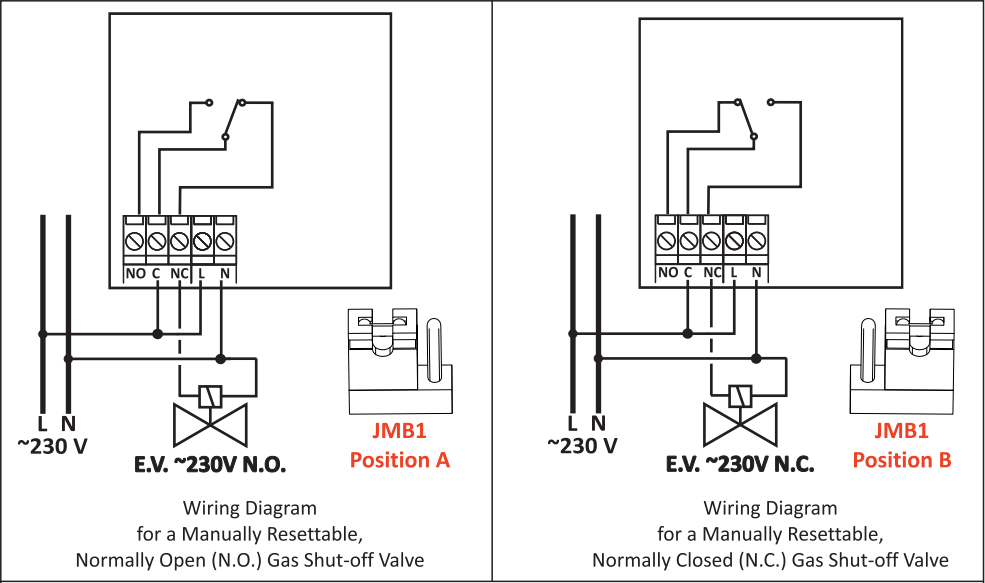


Figure 4. Wiring Diagram for Different Types of Gas Shut-off Valves

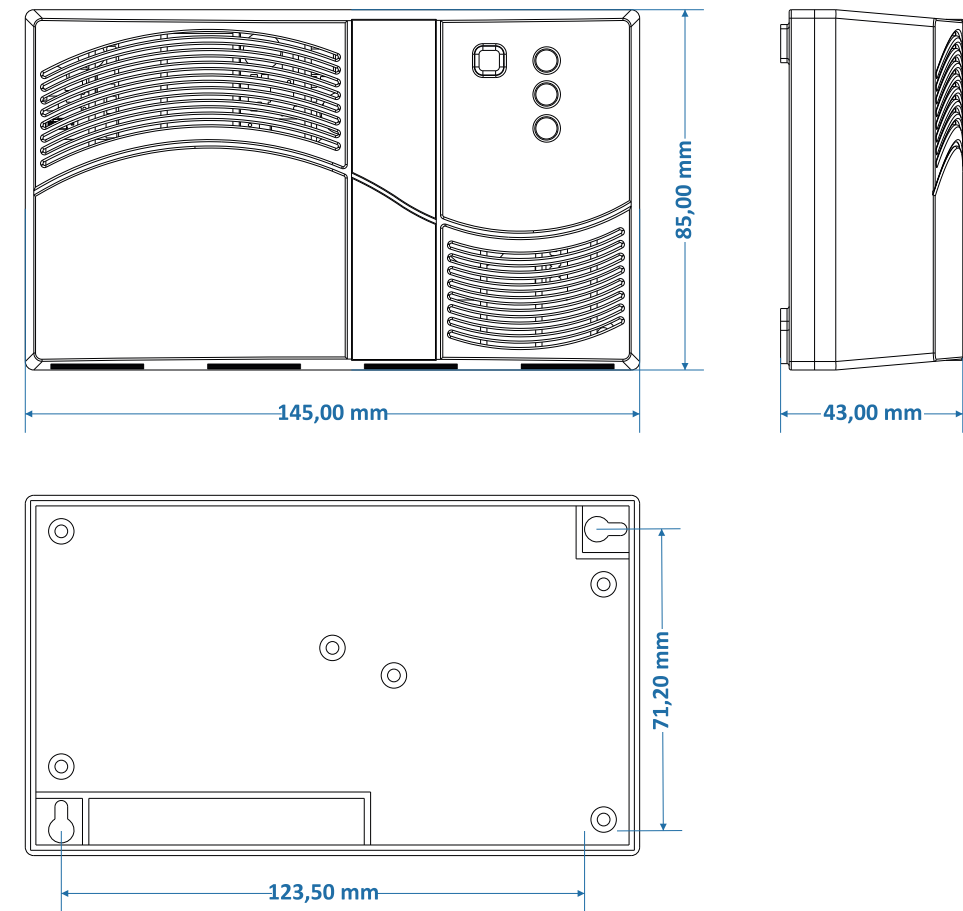
Once the installation and electrical connections have been completed, refit the device cover and secure it using the screw removed in Step 2 of the installation procedure. Then refit the protective screw cover removed in Step 1 of the installation procedure.

Sensor Replacement

The sensor shall only be replaced by qualified personnel after disconnecting the detector from the power supply.

- Follow Steps 1 and 2 of the installation procedure to disassemble the detector.
- Disconnect and remove the sensor from the connector on the main PCB (see Step 4 for the sensor location).
- Connect the new sensor, ensuring that it is suitable for the type of gas to be detected.

Dimensional Drawing



Technical Characteristics

DEVICE TYPE	BS-694	BS-695
SUPPLY VOLTAGE	220-240V AC/50-60Hz	
MAXIMUM POWER CONSUMPTION	1.8W / 2.3VA	
DETECTION SENSITIVITY	5–15% L.E.L. PROPANE	5–15% L.E.L. METHANE
INDICATORS	POWER LED, ALARM LED, FAULT LED	
OUTPUT	RELAY (230 V AC, 5 A)	
12 V DC N.O. GAS SHUT-OFF VALVE OUTPUT	YES	YES
EXTERNAL SOUNDER OUTPUT	NO	NO
SENSOR SERVICE LIFE	5 years	
ENCLOSURE PROTECTION RATING	IP40	
PRODUCED IN ACCORDANCE WITH	EN 50194, EN 61000-3-2, EN 61000-3-3	
OPERATING TEMPERATURE RANGE	0 to 60 °C	
RELATIVE HUMIDITY	Up to 95%	
HOUSING MATERIAL	ABS/PC	
DIMENSIONS (L x W x H)	145 x 85 x 43 mm	
TYPICAL WEIGHT	270gr.	
WARRANTY	2 years	

Replacement Parts

328000013 NGM2611 METHANE / ALCOHOL SENSOR
328000014 LPM2610 PROPANE (LPG) SENSOR

Waste Electrical and Electronic Equipment

This symbol indicates that this product must not be disposed of with household waste. Instead, it should be taken to an appropriate collection point for the recycling of electrical and electronic equipment, in accordance with local laws and regulations. Proper disposal helps protect the environment and human health from potential hazards. The batteries of the product must also be collected separately and taken to designated battery recycling points. Do not incinerate them.

Terms of Sales - Technical Support



72nd km. O.N.R. Thessaloniki-Katerini
P.C. 60300 P.O. Box 06 Eginio Pierias Greece
www.olympia-electronics.com
info@olympia-electronics.com



AUTONOMOUS GAS DETECTORS

Thank you for your trust in our products
Olympia Electronics - European manufacturer