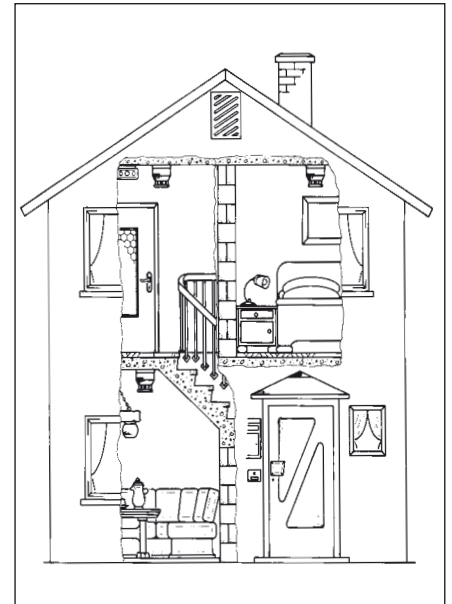


Electronic gas and smoke detector GRM



Electronic gas and smoke detector GRM

When used with gas and smoke sensors (refer to page 102), GRM continuously monitors explosive gases, vapours and/or smoke and generates alarms.

The GRM electronic gas and smoke detector is installed in boiler rooms and basements, storage, office and living rooms as well as public facilities or industrial buildings for increased safety (building technology). The evaluation unit is designed for either wall mounting or control panel mounting by means of a mounting frame. For arduous applications a sealing set (IP 54) is available. GRM has an alarm threshold and is fitted with a relay contact. When the threshold value is exceeded, the unit generates an alarm signal. The red „Alarm“ LED lights up and the alarm relay switches. An additional integrated buzzer provides an audible alarm. This audible alarm can be muted with the re-set button. If the condition which caused an alarm is cleared, the visual alarm can then also be re-set by once again pressing the re-set button. Only then can the alarm be muted with the re-set button. However, if the gas concentration level is still above the alarm threshold level,

muting of the alarm is not possible. Using the voltage-free changeover contact additional alarms or units such as horns, lamps, ventilator fans etc. can be operated and controlled. The following **sensor combinations** are possible:

1. 1 gas and 1 smoke sensor
2. 2 gas sensors
3. 2 smoke sensors
4. 1 gas sensor
5. 1 smoke sensor

Sensor types:

- Gas sensor Part no. 61188 A (for methane)
- Gas sensor Part no. 61189 A (for propane/butane)
- Smoke sensor Part no. 61151

Please order sensors and calibration separately (refer to page 102).

PU: 1	DG	Part no.	Price €
Electronic gas and smoke detector GRM	H	61150	
Accessories:			
Frame	G	43521	
Sealing set (IP 54)	G	43416	

Technical specifications

Supply voltage: AC 230 V

Power consumption: 15 VA

Inputs: 2 sensors, Connection cable, 3 cores, cross section > 0.5 mm², max. distance evaluation unit – sensor: 150 m

Alarm threshold

1 permanently fixed alarm threshold for alarm generation at 20 % LEL (for gases) with alarm memory

Alarm

Red LED and integrated buzzer (approx. 70 dB (A))

Indicators/outputs

- 1 green LED – operational
- 1 red LED – blinking for fault – permanently on for alarm
- 1 relay with voltage-free changeover contact

Contact rating: AC 250 V, 2 A

Operating temperature range 0 °C/+40 °C

Weight: 0.55 kg

Design

Suitable for wall mounting (control cabinet mounting possible with additional frame)

Housing: Wall mounting housing made from impact resistant plastic (ABS)

W x H x D: 100 x 188 x 65 mm

Protection: IP 40 (EN 60529)

Gas and smoke sensors for GRM electronic gas and smoke detectors



Gas sensor

Semiconductor gas sensor in plastic housing for connection to electronic gas and smoke detector GRM (refer to page 101). To be used in dry rooms (e.g. heating installations). Detectable gases: methane, butane, propane. LEDs indicate the operating and alarm state of the system also at the sensor:

- LED green – operational
- LED yellow – fault
- LED red – gas alarm

The sensors must be calibrated for the relevant gas. Please specify the gas to be monitored when ordering.

Technical specifications

Measured gases

Inflammable gases and vapours in ambient air

Measuring range

0 to 50 % LEL

Measuring principle

Semiconductor (service life approx. 5 years, depending on operating conditions)

Operating temperature range

0 °C/+40 °C

Humidity

Max. 75 % relative humidity

Housing

Wall mounting plastic housing

W x H x D: 80 x 80 x 35 mm

Weight: approx. 100 g

Smoke sensor

Photoelectronic smoke sensor in plastic housing for connection to electronic gas and smoke detector GRM (refer to page 101). To be used primarily in domestic dwellings (such as living rooms, bedrooms, halls, staircases, corridors). The operating and alarm state is indicated both at the alarm device (GRM) and at the smoke sensor:

- Visual indication via LED green/red at GRM and LED red/red at the smoke sensor.
- Audible alarm via internal piezoelectric buzzer in alarm unit GRM and at the smoke sensor.

Calibration for gas sensor

Prior to shipment, the gas sensors listed above are calibrated to the gas specified by the customer. Therefore, please always indicate the gas type when ordering.

Please order sensors and calibration separately.

Technical specifications

Sensor

Photoelectronic

Measuring principle

Scattered light principle

Supply voltage

DC 12–28 V

Audible alarm

85 dB (A) (at a distance of 3 m)

Test button

For sensitivity, audible alarm

Operating temperature range

+5 °C/+39 °C

Humidity

Max. 80 % relative humidity

Housing

Wall mounting plastic housing

Outside dimensions

Ø 155 mm, height 38 mm

Electrical connections

Screw terminal strip

Weight

Approx. 195 g

	Part no.	PU	DG	Price €
Gas sensor for methane	61188A	1	H	
Gas sensor for propane, butane	61189A	1	H	
Calibration costs for gas sensor	61177	1	---	
Smoke sensor	61151	1	H	