AMS®
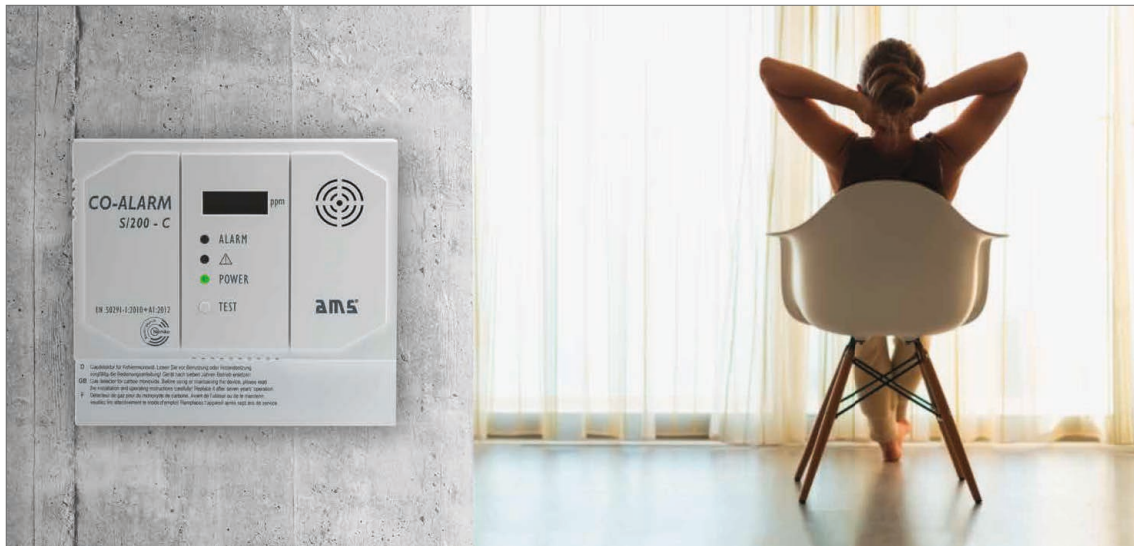
Automatische Mess- und Steuerungstechnik GmbH

Our quality gas detectors
For your safety at home and away

CONTENTS

ABOUT AMS

People cannot always recognise the danger from hazardous gases, but AMS quality gas detectors can. We never compromise when it comes to your safety.

AMS is an established traditional company with experienced and qualified employees. Our quality gas detectors are used in private households as well as mobile homes, caravans, and in lorry driver cabs. They detect volatile town gas/natural gas (methane), liquefied petroleum gas (propane/butane), carbon monoxide and narcotic gas far below hazardous gas concentrations. Our high-grade sensors have a service life of up to 7 years. Our gas detectors have no need of inconvenient battery changes.

In the event of a gas alarm, an optical and acoustic warning is issued. In some of our AMS gas detectors, other external devices can be controlled, including alarm systems, telephones via GSM module, control units for opening windows, valve controls for switching off the gas supply or other signal generators such as signal horns or warning lamps. Ideally, a gas detector is installed in each room with a combustion device.

We develop and produce our quality gas detectors exclusively in Germany and only sell our products through qualified experts. Each of our devices is manufactured to the highest standards and is subject to a strict functional check before shipment.

Technical and design-related changes reserved.

GASALARM S/200-P

The GASALARM S/200-P detects explosive methane, butane and propane gas. Additional switching outputs enable further safety-relevant expansion options.

Town gas/natural gas (methane) and liquefied petroleum gas (propane/butane) are used for heating, cooking or heating water. Also chimney stoves or tiled stoves and saunas can be operated using natural gas. Usually, the operation of common heaters and household appliances is not dangerous as long as they are operated correctly and are not faulty. But if a line is leaking, if a connection or device is not leaktight or if a heater and household appliance is defective, explosive gas unintentionally escapes.

The GASALARM S/200-P detects town gas/natural gas (methane) and liquefied petroleum gas (propane/butane) well before an explosive mixture occurs. It is designed in accordance with DIN EN 50194-1:2009 and DIN EN 60335-1.

Equipment features

· The gas concentration is continuously measured by a high-grade gas sensor.

· In the event of a gas alarm, an optical (red alarm display) and acoustic (loud signal horn) warning are issued.

· Two available switching outputs enable additional possible applications:

· Relay output 5 A/230 V AC: Potential-free normally opening contact for optional connection to an alarm system, a telephone, a control unit for opening windows, a valve control system for switching off the gas supply or to further signal generators or devices.

· 12 V output for direct control of an external signal horn or warning lamp, for example (see Accessories on page 14).

Response thresholds

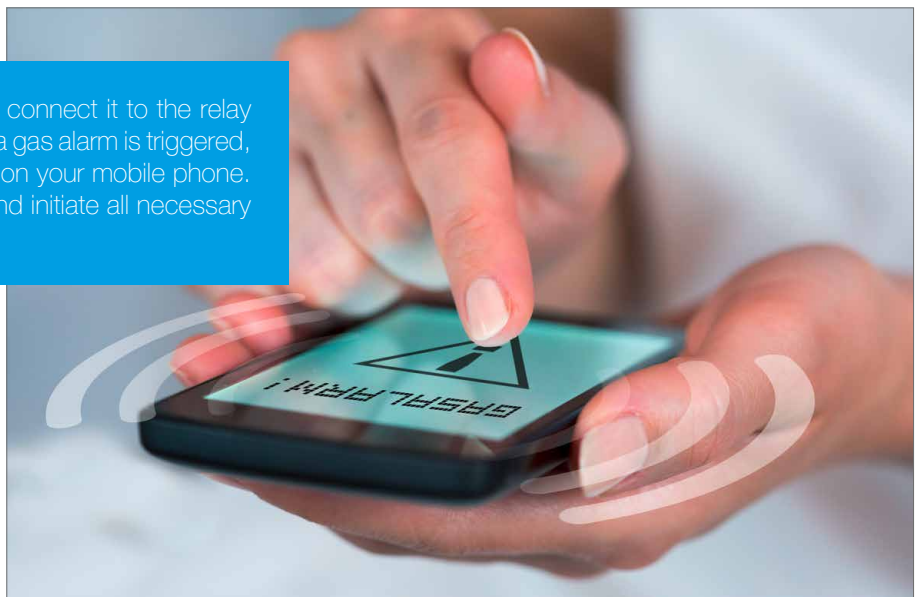|	
Butane (liquefied petroleum gas)	approx. 0.2050 vol.% in the room air
Propane (liquefied petroleum gas)	approx. 0.2400 vol.% in the room air
Methane (town gas)	approx. 0.4000 vol.% in the room air

EN 50194-1:2009   CE

If you have a GSM module, you can connect it to the relay output of the GASALARM S/200-P. If a gas alarm is triggered, you will immediately receive an SMS on your mobile phone. This enables you to react promptly and initiate all necessary rescue measures.

Expand your alarm system by a bit more safety: Integrate the network-capable GASALARM S/200-P in your alarm system. If a gas alarm is triggered, the entire alarm system activates at once, and you and the connected rescue services are immediately notified.
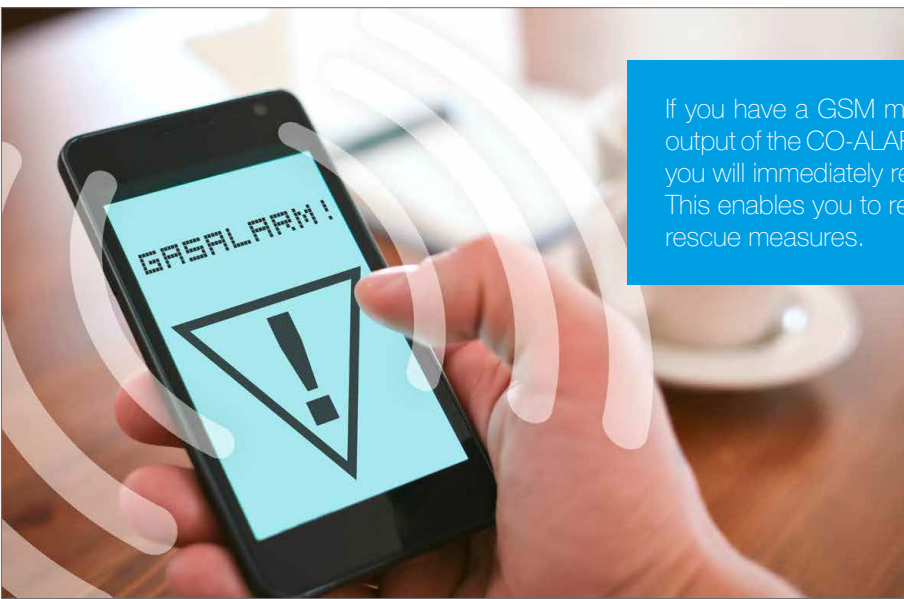
If you have a GSM module, you can connect it to the relay output of the CO-ALARM S/200-C. If a gas alarm is triggered, you will immediately receive an SMS on your mobile phone. This enables you to react promptly and initiate all necessary rescue measures.

Expand your alarm system by a bit more safety: Integrate the network-capable CO-ALARM S/200-C in your alarm system. If a gas alarm is triggered, the entire alarm system activates at once, and you and the connected rescue services are immediately notified.

CO-ALARM S/200-C

The CO-ALARM S/200-C detects hazardous carbon monoxide. Additional switching outputs enable further safety-relevant expansion options.

Equipment features

· The CO concentration is continuously measured by a high-grade gas sensor.

· In the event of a CO alarm, an optical (red alarm display) and acoustic (loud signal horn) warning are issued, and the CO concentration shown on the digital display.

· Two available switching outputs enable additional possible applications:

· Relay output 5A/230VAC: Potential-free normally opening contact for optional connection to an alarm system, a telephone, a control unit for opening windows, a valve control system for switching off the gas supply or to further signal generators or devices.

· 12V output for direct control of an external signal horn or warning lamp, for example (see Accessories on page 14).

Carbon monoxide (CO) is generated during the combustion of solid fuels (e.g. wood, coal, coke), liquid fuels (e.g. oil and benzene) and gas fuels (e.g. natural gas, town gas and liquefied petroleum gas [LPG]). The operation of common heaters and household appliances is not dangerous as long as they are operated correctly and are not faulty. If a device is not leaktight or is defective, carbon monoxide unintentionally escapes. The dangerous thing about carbon monoxide is that it is a colourless, odourless and flavourless toxic gas which can cause a fatal lack of oxygen in closed rooms.

The CO-ALARM S/200-C detects concentrations of carbon monoxide long before the gas can become a danger to health. Design type tested in accordance with DIN EN 50291-1:2010 + A1:2012 and DIN EN 60335-1.

Response thresholds

CO - 50 ppm	Alarm between 60 and 90 minutes
CO - 100 ppm	Alarm between 10 and 40 minutes
CO - 300 ppm	Alarm in less than 3 minutes

KOMBIALARM

Two important warning functions in a single device. The KOMBIALARM is a detector of narcotic gas and other gases at the same time. Switching outputs enable additional safety-relevant expansion options.

The AMS KOMBIALARM is based on semiconductor technology that has been tried and tested over many years, and is suitable for use in mobile homes, caravans and in lorry driver cabs. Hazardous narcotic gases are detected even at extremely low concentrations long before they can exert their harmful effect. Also liquefied petroleum gas (propane/butane) and town gas/natural gas (methane) are detected well before an explosive mixture occurs. The power consumption of approx. 90 mA during normal operation is very low.

Equipment features

· The narcotic gas as well as the methane, propane and butane concentrations are continuously measured by a high-grade gas sensor.

· In the event of a narcotic gas and gas alarm, an optical (red alarm display) and acoustic (loud signal horn) warning are issued.

· Two other sensors for the detection of gas, narcotic gas or carbon monoxide can also be connected. Consequently, the different properties of the various types of gas and their behaviour in air as well as the size of the vehicle can be taken into account (see Accessories on page 13).

· Relay output 1 A/30 V DC: Potential-free normally opening contact in order to trigger an output signal that can be used for directly or indirectly switching on ventilation or for triggering an external signal horn or warning lamp.

· The VOLTAGE MONITOR UC 12 can be connected upstream (see page 12).

Response thresholds

Narcotic gas   from approx. 100 ppm (depending on the narcotic gas)
Butane (liquefied petroleum gas)   approx. 0.4 % in the room air
Propane (liquefied petroleum gas)   approx. 0.5 % in the room air
Methane (town gas)   approx. 0.8 % in the room air
Carbon monoxide (additional sensor)   approx. 200 ppm

CE

KOMBIALARM compact

Two important warning functions in a single device.
The KOMBIALARM compact detects narcotic gas and other gases at the same time.

Equipment features

· The narcotic gas as well as the methane, propane and butane concentrations are continuously measured by a high-grade gas sensor.

· In the event of a narcotic gas and gas alarm, an optical (red alarm display) and acoustic (loud signal horn) warning are issued.

· The VOLTAGE MONITOR UC 12 can be connected upstream (see page 12).

The AMS KOMBIALARM compact is based on semiconductor technology that has been tried and tested over many years, and is suitable for use in mobile homes, caravans and in lorry driver cabs with small volumes of space. Hazardous narcotic gases are detected even at extremely low concentrations long before they can exert their harmful effect. Also liquefied petroleum gas (propane/butane) and town gas/natural gas (methane) are detected well before an explosive mixture occurs. The power consumption of approx. 90 mA during normal operation is very low.

Response thresholds

Narcotic gas	from approx. 100 ppm (depending on the narcotic gas)
Butane (liquefied petroleum gas)	approx. 0.4 % in the room air
Propane (liquefied petroleum gas)	approx. 0.5 % in the room air
Methane (town gas)	approx. 0.8 % in the room air

CE

GASALARM P100

The gas alarm for safety in homes, caravans and motor homes

The GASALARM P100 detects liquefied petroleum gas (propane/butane) and town gas/natural gas (methane) well before an explosive mixture occurs and warns with an optical and acoustic alarm.

The optional switching output can be used to connect external devices like airing, signal lamp and siren.

Response thresholds

Butane (liquefied petroleum gas)	approx. 0.2050 vol. %
Propane (liquefied petroleum gas)	approx. 0.2400 vol. %
Methane (town gas)	approx. 0.4000 vol. %

VOLTAGE MONITOR UC 12

Suitable for all 12 V alarm devices

A narcotic gas and gas detector only functions when an intact power supply is available. If the power supply is switched off, capped or interrupted by a defect, the installed detector does not function. This creates a gap in the safety system.

The VOLTAGE MONITOR UC 12 is designed for the continuous monitoring of a 12 V DC voltage. If the voltage to be monitored drops below a fixed threshold value, an optical and simultaneous acoustic alarm are immediately triggered. Only when a warning is given can the user be protected. In the event of failure of the 12 V supply voltage, a 9 V block battery maintains the alarm for up to two days.

Suitable for the 12 V KOMBIALARM, KOMBIALARM compact narcotic gas and gas detectors and all 12 V alarm devices of other makes.

ACCESSORIES

For the KOMBIALARM

Up to two additional sensors for the detection of gas, narcotic gas and carbon monoxide can also be connected to the AMS KOMBIALARM alarm system. Consequently, the different properties of the various types of gas and their behaviour in air and the size of the vehicle can be taken into account.

Additional sensor for narcotic gas/gas

The additional sensor detects extremely low concentrations of hazardous narcotic gases long before they can exert their harmful effect. Also liquefied petroleum gas (propane/butane) and town gas/natural gas (methane) are detected well before an explosive mixture occurs.

Response thresholds

Narcotic gas   from approx. 100 ppm (depending on the narcotic gas)
Butane (liquefied petroleum gas)   approx. 0.4 % in the room air
Propane (liquefied petroleum gas)   approx. 0.5 % in the room air
Methane (town gas)   approx. 0.8 % in the room air

Additional sensor for carbon monoxide

The additional CO sensor is designed for the detection of carbon monoxide long before it can become a danger to health.

Response thresholds

Carbon monoxide   approx. 200 ppm

ACCESSORIES

Optical alarm unit

In addition to the internal siren, the AMS KOMBIALARM offers the possibility of controlling external devices, e.g. a flashlight, auxiliary siren, fan, etc.

A potential-free normally opening contact and normally closing contact are available for this. These contacts can be loaded with max. 1 A/30 VDC.

Flashlight

Approx. 75 flashes of light generated per minute.

Flashlight alarm unit with siren

The sound volume can be freely adjusted and has a max. level of 104 dB. Approx. 60 flashes of light are generated per minute.

Siphon odour trap

The siphon odour trap prevents smells from the waste water tank. It is simply inserted into the severed wastewater hose. It is cleaned by rinsing out with water. The siphon odour trap is available for hose sizes of Ø 19 mm (3/4") and of Ø 25 mm (1").

TECHNICAL DATA

GASALARM S/200-P 230 V
Page 4

Operating voltage	230 V AC/50 Hz
Power consumption	max. 6 VA
Alarm volume	85 dB (A)/1 m
Operating temperature range	- 10°C/+ 40°C
Protection class	IPX2D
Dimensions	140 x 125 x 42 mm (W x H x D)

GASALARM S/200-P 12 V
Page 4

Operating voltage	12 V DC (- 15 %/+ 20 %)
Current consumption	max. 130 mA
Alarm volume	85 dB (A)/1 m
Operating temperature range	- 10°C/+ 40°C
Protection class	IPX2D
Dimensions	140 x 125 x 42 mm (W x H x D)

CO-ALARM S/200-C 230 V
Page 6

Operating voltage	230 V AC/50 Hz
Power consumption	max. 6 VA
Alarm volume	85 dB (A)/1 m
Operating temperature range	- 10°C/+ 40°C
Digital display	3 digits/7-segment, standard value display
Protection class	IPX2D
Dimensions	140 x 125 x 42 mm (W x H x D)

CO-ALARM S/200-C 12 V
Page 6

Operating voltage	12 V DC (- 15 %/+ 20 %)
Current consumption	max. 100 mA
Alarm volume	85 dB (A)/1 m
Operating temperature range	- 10°C/+ 40°C
Digital display	3 digits/7-segment, standard value display
Protection class	IPX2D
Dimensions	140 x 125 x 42 mm (W x H x D)

KOMBIALARM
Page 8

Operating voltage	12 V DC (- 10 %/+ 20 %)
Power consumption	approx. 90 mA (idle state), approx. 145 mA (alarm state)
Alarm volume	approx. 85 dB (A)
Operating temperature range	- 10°C/+ 40°C
Protection class	IP 20 DIN 40050
Dimensions	115 x 90 x 30 mm (W x H x D)

KOMBIALARM compact
Page 10

Operating voltage	12 V DC (- 10 %/+ 20 %)
Power consumption	approx. 90 mA (idle state), approx. 145 mA (alarm state)
Alarm volume	approx. 85 dB (A)
Operating temperature range	- 10°C/+ 40°C
Protection class	IP 20 DIN 40050
Dimensions	115 x 90 x 30 mm (W x H x D)

GASALARM P100
Page 12

Operating voltage	12 V DC (- 10 %/+ 20 %)
Power consumption	max. 250 mA
Alarm volume	approx. 85 dB (A)/1 m
Operating temperature range	- 10°C/+ 40°C
Protection class	IP 42
Dimensions	60 x 90 x 31 mm (W x H x D)

VOLTAGE MONITOR UC 12
Page 12

Operating voltage	12 Volt DC (- 15%/+ 20 %)
Current consumption	approx. 7 mA (normal operation)
Alarm volume	approx. 85 dB (A)/1 m
Protection class	IP 20 DIN 40050
Dimensions	60 x 90 x 31 mm (W x H x D)
Operating temperature range	- 10°C/+ 40°C

ADDITIONAL SENSOR FOR NARCOTIC GAS/GAS
Page 13

Power consumption	approx. 60 mA
Operating temperature range	- 10°C/+ 40°C
Protection class	IP 20 DIN 40050
Dimensions	49,6 x 49,6 x 24 mm (W x H x D)

ADDITIONAL SENSOR FOR CARBON MONOXIDE
PAGE 13

Power consumption	approx. 130 mA
Operating temperature range	- 10°C/+ 40°C
Protection class	IP 20 DIN 40050
Dimensions	49,6 x 49,6 x 24 mm (W x H x D)