

GMA101

Gas warning system for 19" Rack-mounting



Safe recognition and warning of gas hazards

The GMA101 provides 3 alarm levels, which can be used for taking appropriate counter measures in case of gas hazards. The pre-alarm, for example, may give a warning for low gas concentrations, thus indicating leakages before dangerous situations occur. The following first and second main alarm thresholds notify direct danger requiring immediate action.

The alarm levels can be variably set within the detection range and adapted to changing requirements. Every threshold can be selected to be latching/non-latching and resettable/non-resettable. The adjustable alarm delay prevents false alarms.

Quick reaction means increased safety

Every GMA controller provides optional voltage-free relays for the 3 alarms and for fault warning. The relays may be used for controlling external alarm devices like beacons and buzzers or, e.g. by closing solenoid valves or turning a fan on, they can introduce specific counter measures to prevent dangers from gases or vapours.

Every relay can be either a normally closed (NC) or normally open (NO) contact and works in either closed or open circuit operation. This flexibility allows the GMA to meet individual requirements and to offer a safe solution for specific gas detection problems.

Technical Data

Gas:

Depending on transmitter:
Combustible and toxic gases and vapors, oxygen

Detection range:

Depending on requirements:
% LEL, % Vol., ppm, mg/m³

Ambient temperature: 0 .. +55°C

Humidity: 0 .. 99 % r.h.

Power supply:

230/115 V, 50/60 Hz, 24 V DC,
Battery back-up (option)

Power consumption: Max. 4 W, normal 2 W

Input signal: 0.2 .. 1 mA / 4 .. 20 mA

Alarm functions:

Exceeding / falling short,
Latching / non-latching
Resettable / non-resettable,
Adjustable hysteresis
Alarm delay 0 .. 2 min.

Relay outputs:

4 voltage-free relay outputs for alarm and fault, NC contacts, NO contacts
Load: max 250 V, 1000 VA

Display:

3-digit LED display for linearized measurement values, service
1 LED green - Operation,
1 LED yellow - Fault,
3 LED red - Alarm,
peak and minimum reading

Output signal:

Linearized transmitter signal
4 .. 20 mA

Function keys:

4 keys for all functions, e.g. alarm thresholds, calibration, function and relay test

Calibration:

Automatic zeroing, calibration by means of measurement value memory

Dimensions:

35 x 128 x 172 mm (WxHxD)

EC-type examination certificate:

ⒺII (2) G BVS 03 ATEX G 004 X C₀₁₅₈

Function certificate:

PFG No. 41300700



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