

GMA301

Gas warning system for 19" Rack-mounting



GMA301 for 1 transmitter for control of one measuring point. 3 alarms and fault output.

Data communication over CAN BUS

The GMA300 system is a microprocessor-based, 19" rack mounted gas control system for all measuring functions. Depending on the transmitter type connected, the GMA300 is a complete gas detection system for detection of flammable and toxic hazards, and oxygen.

Versatile performance

All GfG transmitters can be connected to the GMA301. More than 500 different gases can be monitored. All settings are made via touch keys on the front, with a display menu. A coded service key protects the system from unauthorized access. Gas concentration is continuously shown on a 3-digit LED display.

Gas concentration, gas type and detection range can all be displayed via a simple button push. Zero and span adjustment can also be performed simply via the simple operation from push buttons. The controller has a min/max memory that enables the user to check the exact concentrations encountered after a gas alarm has occurred. In addition, the highest or lowest measured value is stored and displayed in the LED display. A 4-20mA output is available to transmit gas measurement readings to external devices.

Alarm functions

3 alarm thresholds can be set. Additional relay and alarm functions are adjustable: exceeding/falling below, latching/not latching, quiescent current/full load current, open/normally closed contact, signal delay and hysteresis. 4 LED lights display operation status, alarm and fault signals.

Delta alarm

The delta alarm function can be used to ensure the fastest response to a gas leak. Not only the measured gas concentration is considered, but also the rate of rise of the measured value. An unusually fast rate of rise can be used to trigger the alarms, even before the normal threshold value has been reached.

Technical Data

Gas:

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

Detection range:

Depending on requirements:
% LEL, % Vol., ppm

Ambient temperature:

-10°C .. +55°C

Humidity:

0 .. 99 % r. h.

Power supply:

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

Power consumption:

Max. 13 W

Input signal:

0.2 .. 1 mA / 4 .. 20 mA

Output signal:

4 ... 20 mA
CAN open

Relay output:

4 voltage free contacts for alarm and fault, NO, NC,
load: 250 V / 4 A

Alarms:

3 delta alarms, adjustable

Alarm functions:

Exceeding / falling below,
Latching / self resetting,
Resettable / non-resettable,
Adjustable hysteresis,
Alarm relay

Display:

3 digit LED display for concentration
readings and programming
1 LED green for operation
1 LED yellow for failure
3 LED red for alarm 1, 2 and 3

Function keys:

Service code keys for service menu, maintenance
resp. for changing of parameters.
4 push buttons for changing of parameters and for
access to menu points

Test sockets (front):

Transmitter signal,
standardized output signal: 0 .. 10 V

Function test:

DMT Report IBS/PFG 41300596

Dimensions:

35.2 x 129 x 16 mm (W x H x D)



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