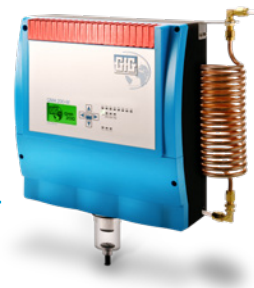


Technical specifications:

GMA200-MGSS



Display & control elements		Status-LEDs:	15 status LEDs for alarms, operating and relay states
		Display:	2,2" graphic display
		Buttons:	5 buttons
		Alarm:	Buzzer max.100dB(A) einstellbar
Environmental conditions		Mounting:	only indoors up to 2000m above sea level
		Storage:	-25..+60°C 0..99%r.h. (recommended: 0...+30°C 40...60%r.h.)
		Operating:	-10..+45°C 0..99%r.h.
Power supply		Operating voltage:	100-240V AC 50-60Hz mains voltage or 24V DC (20-30V DC permitted)
		Leistungsaufnahme:	max. 42VA or 20W
		Sicherungen:	F1=T 500mA (for GMA200) F2=T 500mA (for gas sensors) F5=T 315mA (for flow controller)
Measuring gas supply		Gas treatment:	Cooling coil (optional) Condensate trap with water barrier (optional) Flame arrester (optional)
		Path changeover:	Solenoid valve (optional)
		Sample gas pump:	Membrane pump (flow-controlled, typical 0,5l/min)
Gas sensors		Sensor block:	with maximal 3 sensors 1 catalytic combustions sensor for measuring flammable gases and vapours 2 electrochemical or infrared sensors for the measurement of toxic and combustible gases as well as oxygen
Measurement processing		Update time:	1s
		Setting times:	Rise time $t_{50} < 2s$ or $t_{90} < 2sec$ Decay time $t_{50} < 2s$ or $t_{10} < 2sec$ plus the adjustment times of the gas sensors and depending on the length of the suction section (extended by setting times of the gas measuring transmitters)
		Standby delay:	<40s (can be extended by running-in times of gas measuring transmitters)
RS485 outputs		GMA bus:	RS485; Half-Duplex; max. 230400 Baud (for GMA200 relay modules, Central, PC, SPS or Gateway)
		TRM bus1:	RS485; Half-Duplex; max. 38400 Baud (only for GMA200 relay modules)
Relay outputs		Contacts:	8 relays with one changeover contact per relay
		Contact rating:	3A/250V AC or 3A/30V DC
		Minimum switching current:	10mA
		Minimum switching voltage:	5V
		Schalthäufigkeit:	max. 100 per year (per relay contact), applies to SIL applications according to EN 50402
		Isolationsabstände:	Basic insulation between the relays: 1&2, 3&4, 5&6, 7&8 Double insulation between the relays: 2&3, 4&5, 6&7
Analogue outputs		IOUT1+2:	4-20mA with linear transfer function (load max. 560Ω)
		Accuracy:	±0,3%MR@10...30°C or ±0,8%MR@-20...50°C (MR=Measuring/signal range)
Alarm acknowledgement inputs		Reset1+2:	0-3V DC (Alarm acknowledgement takes place on contact with GND; $U_{MAX} = 30V$ DC)
Data logger (optional)			max. 2GB microSD card with FAT formatting (FAT16)

Technical specifications:

GMA200-MGSS



USB connection

Mini USB socket for device configuration with PC

Housing

Protection class: IP54 according to IEC 60529; IK08 according to IEC 62262
Material: Plastic
Dimensions: 270 x 290 x 98 mm (B x H x T) (varies depending on version)
Weight: approx. 2,8...3,2 kg (depending on version)

Cable junction

Cable: 3-wire $\geq 0,75\text{mm}^2$ LiYY, NYM (for GMA200 supply)
2-wire $1 \times 2 \times 0,22\text{mm}^2$ BUS-LD (for GMA bus at length > 10m)
Cable glands: 7 pieces M16x1,5 (for cable diameter 4,5-10mm)
0,08..2,5mm² cross section

Approvals / Tests

Electromagnetic compatibility: DIN EN 50270:2015 (Interference emission: type class I, interference immunity: type class II)
Electrical safety: EN 61010-1:2010 (Pollution degree 2, overvoltage category II for mains supply)
(Pollution degree 2, overvoltage category III for relay contacts)