Geopal GP-SA-2

Geopal GP-SA-2
Stand-alone detector

Geopal GP-SA-2 is also available as gas alarm monitor for connection of one detector (option)

The Geopal GP-SA-2 stand-alone detector is designed for industry and marine.

The GP-SA-2 detector uses an integrated microprocessor for continuously monitoring the gas concentration, whether it is in the 0-100% LEL range (lower explosion level) or the 0-40,000 ppm range, for e.g. refrigerants.

The signals of the Geopal GP-SA-2 detector are converted to a linear output signal of 4-20 mA or 0-5/10V.

The detector is equipped with alarm relays for low alarm, high alarm and system fault.

Service function

The "service button" is used to prevent alarms to be transmitted to the external system to stop the system e.g. by calibration, service and refill of coolant.

Using the service button the alarm relays are deactivated, the fault relay is activated and the analog output switches to 2 mA.

Easy to calibrate

The servicing of Geopal GP-SA-2 requires no special tools or equipment, only a test gas with the given gas concentration. The actual calibration can be carried out by one person in less than 10 minutes, using a simple push-button system with associated light indicators.

Simple installation

For the external wiring of the detector a three-conductor cable is normally all you need. Depending on how many relay functions are required, the number of conductors would be increased accordingly.

Linear output

Based on a mathematic analysis of the characteristic formed by the semiconductor sensor, the detector generates a model, which results in an analogue output that will be linear in the entire detection range.

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DIC444QMS DBI reg.no. 233.301 SP14ATEX7159

Technical Data

GP-SA-2

Supply voltage	85 to 264 VAC, 24VDC
Power consumption	100 W max. *(depended on connected flash/sounder)*
Available gases	Methane (CH_4), Propane (C_3H_8), Butane (C_4H_{10}), Hydrogen (H_2), Hexane (C_6H_{14}), Benzene (C_6H_6), Ethane (C_2H_6), Carbon Monoxide (CO), Pentane (C_5H_{12}), Ethylene (C_2H_4), Ammonia (NH_3), R404A, R407C, R417A, R245fa, R134a, etc.
Detection range	0-40,000 ppm, 0-100 % LEL
Response time T90	< 5 seconds depending on gas type
Repeatability	+/- 5 % of FS range
Long-term stability	< 5 % FS / 12 months
Self-diagnostics	Continuous
Electrical output	4–20 mA / (2 mA fault) or 1–5 V / (0,5 V fault) or 2–10 V / (1 V fault), 0-5 V, 0-10 V
Relay outputs	2 relay outputs for alarm 1 and alarm 2 1 relay output for fault Signal contact 230 V / 6 A
Material housing	Polycarbonate, black
IP rating	IP 65 DIN 60529
Weight	0,75 kg
Mechanical dimensions	180x170x60 mm
Max operating conditions	Temperature -25 °C to +55 °C Humidity 15 %RH to 90 %RH not condensing Pressure 1013 mbar ±10%
Storage	Temperature -25 °C to +55 °C Humidity 0 %RH to 95 %RH
Approvals *(Directives and Standards)*	Electromagnetic Compatibility Directive (EMC) 2014/30/EU Low Voltage Directive 2014/35/EC EN 60 204-1; EN 61 010-1; EN 61 326-1 (2013); EN 61 000-6-2 (2005); EN 61 000-6-3 (2012); EN 50 270 (2015)
Quality	ISO 9001:2015

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