DURAN®
electrónica

STANDGAS PRO

STANDALONE DETECTOR WITH THREE RELAY OUTPUTS

Toxic CO - NO_2 - NH_3 - H_2S - Cl_2 - CO_2 -SO_2 - O_2 - SF_6 , Refrigerants and early detection of H_2

Standalone programmable detector designed to detect toxic gases and O_2 with electrochemical technology, CO_2 and A1 safety grade refrigerants with infrared technology.

Equipped Three programmable alarm relay outputs with different levels for each gas.

Special functions for toxic gases:

- Digital control over the sensor status.
- Automatic testing of hardware status.
- Digital filter based on variable sampling of the sensor's average values.
- Automatic temperature compensation providing a correct response to temperature variations.
- Exact automatic zero adjustment. Monitors zero in relation to the electronics and sensor response. **STANDGAS** automatically runs a test every 30 minutes: if drift is higher or lower than 2% of the scale's total value, it will be readjusted to zero; otherwise, the datum will be displayed as a reading.
- Infrared sensors internally incorporate a microprocessor with controls for temperature compensation, linearisation, and memorisation of calibration parameters.
- Easy replacement in the installation without recalibration or use of gas.

- Standalone functioning: without connection to any control panel
- Mixed functioning: Up to 3 output levels or two plus one fault level. Programming of oxygen alarm level rising or dropping.
- Protection grade IP65. • Universal support with inclination for ceiling and floor - optional
- Power charger at 230V with capacity to connect 1 to 10 **STANDGAS** detector units - optional

AVAILABLE GASES

Carbon monoxide CO - Nitrogen dioxide NO_2 - Ammonia NH_3 - Hydrogen sulphide H_2S - Chlorine Cl_2 - Carbon dioxide CO_2 - Sulphur dioxide SO_2- Sulphur hexafluoride SF_6 - Oxygen O2 - Hydrogen H_2
Refrigerants: R-507/R-125/R-404a/R-407a/R-407f/R-410a/R-449/R-417a/R-448a/R-227ea/R-1233zd/R-513a/R-422d/R-452a/R-134a
Others, please check.

APPLICATIONS

- Pharmaceutical laboratories - University labs - Aircraft industry - Galleries - Distilleries - Refrigeration installations in general - Livestock farming installations - Boiler rooms - Industry in general- Ideal complement for fire protection installations - Early detection of hydrogen leaks from lithium-ion batteries

FACTORY SETTINGS, INSTALLATION HEIGHT AND COVERAGE

GAS	HEIGHT INSTALLATION	RANGE	N. PREALARM RL1	N. ALARM RL3	RL2	AREA COVERED*
CO	1.50/2m. Floor	0-300 ppm	50 ppm	75 ppm	FAULT	Approx. 200m^2
NO_2	40/50cm. Floor	0-20 ppm	3 ppm	5 ppm	FAULT	Approx. 100m^2
NH_3	30/40cm. Ceiling	0-100 ppm	5 ppm	10 ppm	FAULT	Approx. 75m^2
H_2S	1.5m. Floor	0-100 ppm	5 ppm	10 ppm	FAULT	Approx. 100m^2
CO_2	1m. Floor	0-20,000 ppm	5,000ppm	10,000 ppm	FAULT	Approx. 100m^2
O_2	1.70m. Floor	0-25%	18%*	17	FAULT	Approx. 100m^2
Cl_2	1m. Floor	0-10 ppm	0.5 ppm	1 ppm	FAULT	Approx. 100m^2
SO_2	30/40cm. Floor	0-20 ppm	2 ppm	4 ppm	FAULT	Approx. 75m^2
H_2	30/40cm. Ceiling	0-500 ppm	125 ppm	150 ppm	FAULT	Approx. 30m^2
REFRIGER. and SF6		0-2,000ppm	300ppm	600ppm	FAULT	**

REFRIGERANT GASES

**Protect all possible sources of leaks, connections, elbows, gas inlets/outlets, valves, welds, compressors, etc...

All gases of A1 safety groups are heavier than air.
Take into account that set out above.

*O_2 levels dropping

*Coverage data is a guideline, as it can vary depending on the environment

ALL DETECTORS ARE MADE BY DURAN ELECTRÓNICA
FACTORY-CALIBRATED USING SPAN GAS

TECHNICAL CHARACTERISTICS

Technology	Electrochemical / infrared sensor + 12 Bit SIL2* microprocessor
Supply voltage	From 10V to 24V DC
Maximum consumption at 12 V DC	Aprox. 80 mA in standby - 140 mA, 3 relays enabled
Gas measurement range	0-2000ppm refrigerants. A1 Safety groups /toxic SEE TABLE
Resolution	± 1% F.S. toxic -0.25% O_2, 1.5% CO_2 and 1% refrigerant measurement range.
Repeatability	± 2% F.S. and ± 0.5% H_2
Annual span drift	± <1% electrochemical / 0.7% CO_2 / ± 0.1% F.S. refrigerants.
Stabilisation time	< 5 min -all specifications-
T90 Response time	CO, NO_2 SO_2 and NH_3 ≤ 30s / H_2S ≤ 20s / H_2 ≤ 60s /O_2 ≤ 15s / CO_2 ≤ 15s/ ≤ 30s refrigerants
Useful life (MTBF) approx.	Approx. 2 years electrochemical NH_3, H_2S, NO_2 Cl_2 SO_2 H_2 and O_2, 4 years CO and > 5 years $CO_2$and refrigerants.
Maintenance periods	Every year -recommended- or pursuant to current standards.
Environmental conditions	-10ºC to +50ºC and from 15 to 90% R.H. without condensation
Atmospheric pressure limits	80 to 110kPa (0.8 to 1.1 bar)
Alarm relay**	3 fuse-protected dry contact switch outputs 3A 250V AC
Coverage area	See Factory Settings table
Material and protection grade	Makrolon & ABS IP65
Input and cable diameter	Cable glands / 6-10mm^2
Dimensions in mm and weight in g	120 X 160 X 60 / 350

Characteristics in conditions of 20ºC, 50% RH, 1000mbar (100Kpa)

*infrared sensor
**2 alarm outputs + 1 fault output, programmable.

WARRANTY

STANDGAS PRO detectors are guaranteed against any manufacturing defect for 1 year after purchase of the equipment. Warranty conditions are laid down in the detector's installation manual.

ORDER INFORMATION

When placing your order please provide the correct code for the product required and verify that its description is in order.

STANDGAS PRO 3 PROGRAMMABLE RELAY OUTPUTS	
CODE	DESCRIPTION
SSQNxxxMR	STANDGAS PRO (GAS*) with 3-relay module (electrochemical sensor)
SIRYCO2MR	STANDGAS PRO CO2 0-20,000 ppm with 3-relay module (infrared sensor)
SIRYREFMR**	STANDGAS PRO REFRIGERANTS 0-2,000 ppm WITH RELAY MODULE (infrared sensor)
SIRYSF6MR	STANDGAS PRO SF_6 0-2,000ppm WITH RELAY MODULE (infrared sensor)

(*) AVAILABLE GASES (xxx): SSQNCOMR (CO 0-300ppm), SSQNH2SMR (H_2S 0-100ppm), SSQNNH3MR (NH_3 0-100ppm), SSQNNO2MR (NO_2 0-20ppm), SSQN-O2MR (O2 0-25%), SSQNCL2MR (Cl2 0-10ppm), SSQN-H2MR (H_2 0-500ppm) and SSQNSO2MR (SO_2 0-20ppm).
**The gas must be specified, for example: SIRYREFMR-R-410a. SEE LIST OF GASES OVERLEAF.

ACCESSORIES	
CODE	DESCRIPTION
SOPMUN	Universal multiple support
SALIM230	Power adapter at 230V for connection of 1 to 10 STANDGAS detector units

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