Gazex Warsaw

GENERAL SPECIFICATION

REFRIGERANTS (HFC) DETECTOR with EXCHANGEABLE, INTELLIGENT SEMICONDUCTOR

SENSOR



ver. W2

PURPOSE

The WG-61.EG detector is used for continuous monitoring of refrigerant gases (HFC) in closed spaces. Monitoring is performed by periodically measuring the concentration of refrigerant in the ambient air. At the moment when the strictly determined threshold levels are exceeded, visual alarms of the detector are engaged and its control outputs are activated.

WG-61.EG is equipped with the easily exchangeable, intelligent sensor = LOW OPERATING COSTS.

The Freon[®] (HFC) detection system build with WG.EG detectors is very economical as well as extreme simple in mounting.

USE

- cooling engine rooms
- rooms with cooling equipment, air-conditioning or heat pumps

FEATURES

- Measurement of refrigerants (HFC) at low levels
- 3 independent alarm thresholds calibrated to factory standards or tailored to customer's requirements
- Standard calibration for R410A or R134a or R407C
- Easy exchangeable sensor unit = LOW OPERATING COSTS
- 3 stanard relay outputs, NO type
- Removable terminals with a self-locking connectors = easy and fast system set-up
- Built-in microprocessor controlling all functions of the detector = reliability, work stability, temperature compensation circuit, fully automatic operation
- Gas detector + power supply + control unit all in one solid case, splash proof (IP54)
- Option: 12 or 24VDC power supply



TECHNICAL SPECIFICATION

Supply voltage	230 VAC (±10 %), 50 Hz			
Supply Voltage	$V = 13011 V = -111 \cdot EG/A$. 12 V DC ($9,0 \div 13 V$)			
Power consumption	max 3W/ (ver W/G-nn FG/ A : max 0.14 A @ 12 V/			
	semiconductor type: exchangeable			
Gas sensor	estimated live time in the clean air – approx. 10 years			
Operating temperature	-10°C +45°C recommended			
	-20°C +50°C allowable periodically (<1h/1h24)			
Detected gases	Freon: R410A or R134a or R407C or others refrigerants,			
	Propane, Butane, CH4, other HC			
Interfering gases	H2, alcohols, Chlorine, O2 deficiency (<18% vol.),			
	high rise of RH			
Measuring period	2 s			
Protected aera	~ 200 m ² / detector			
Alarm settings	A1 = 1000 ppm,			
	A2 = 2000 ppm,			
	A3 = 2500 ppm;			
	Standard for R410A or R134a or R407C			
Thresholds	Calibration conditions @ 20(-2/+5)°C, 65(±10)%RH,			
	1013(±30)hPa, >72h supply			
Accuracy	±15 % for A3			
Thermal stability	±20 %, at 0 °C ÷ +40 °C			
Long-term stability	±20 %, per 1 year,			
	but better then \pm 35 % per 3 years			
Calibration period	< 36 mounths (optimal = 12 mounths)			
Optical alarm indicators	lampki LED: A1, A2, A3 = czerwone, AWR (AWARIA) = żółta			
Acoustic alarm	no			
Outputs:	A1, A2, A3; relay w/ NO contact; max 2A (resistive load),			
	max 250VAC or 30VDC			
Dimensions, weight	195 x 80 x 68 mm, H x B x D (with glands); ~0,4 kg			
Enclosure	ABS/PC, IP54			
	12 months Standard Gazex Guarantee (SGG); possibility to			
Guarantee	extend to 36 or 60 months (RGG3Y or RGG5Y) – after product			

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BLOCK DIAGRAM OF HFC CONTROL SYSTEM



Recommended connection cables in the system with WG.EG

You can use single conductor wire, stranded wire or flexible cables

Cable selection table	System with common power/alarm terminals connected to "L" or "N" pin		System with separated power/alarm terminals	
	[No of wires] x [mm ²]		[No of wires] x [mm ²]	
MODEL:	WG-nn.EG	WG-nn.EG/A	WG-nn.EG	WG-nn.EG/A
2-treshold System				
Cable Sz	5x (0,75 ÷ 1,5)	2x 2,5 + 2x 0,75	6x (0,75 ÷ 1,5)	2x 2,5 + 3x 0,75
Cable S	5x (0,75 ÷ 1,5)	4x (0,75 ÷ 1,5)	6x (0,75 ÷ 1,5)	5x (0,75 ÷ 1,5)
3-treshold System				
Cable Sz	6x (0,75 ÷ 1,5)	2x 2,5 + 3x 0,75	7x (0,75 ÷ 1,5)	2x 2,5 + 4x 0,75
Cable S	6x (0,75 ÷ 1,5)	5x (0,75 ÷ 1,5)	7x (0,75 ÷ 1,5)	6x (0,75 ÷ 1,5)
System power supply	230VAC	12VDC	230VAC	12VDC

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