BACHARACH

MGS-460 Gas Detector
for Safety Compliance in Refrigeration Applications

FEATURES	BENEFITS
Mobile App Interface	Quick, easy and intuitive commissioning, configuration and maintenance requires no special training
Simple Configuration via App	No tools required to set alarm behavior and alarm levels
Remote Sensor (5 m cable)	Install gas detection in hard-to-reach areas
Pre-calibrated Sensors	Saves time and money on maintenance procedures
Semi-automated Calibration	Easy process with no potentiometers or volt meters
Temperature-compensated Measurement	Mitigates false alarms and optimizes accuracy in refrigeration applications
Analog and Digital Communications	Integrates with BMS / BAS control systems via Modbus and / or analog outputs
On-board Relays	Triggers additional alarm beacons and mechanical ventilation in the event of a refrigerant leak
Audible and Visual Alarms	Complies with ASHRAE 15 / EN 378 - no additional hardware
Multiple Cable Entries and Terminals	Quick and easy installation of all wiring; daisy-chain power and digital communications
Low-temperature Performance	Suitable for use in all refrigeration applications from machinery rooms to freezers

Refrigerant Gas Detector with Remote Sensor for Halogenated and Natural Refrigerants with Digital and Analog Communications

DESCRIPTION

Bacharach's MGS-460 Gas Detector makes compliance with refrigeration safety codes simple and easy, saving time and money on equipment and installation. The remote sensor allows for gas detection to be installed in hard-to-reach areas with a conveniently located electrical and communication interface. Using the MGS-400 App, users can intuitively use, commission and maintain their gas detection system without the need for specialty training or tools. Pre-calibrated sensor modules simplify maintenance, take minutes to exchange and do not require the use of calibration gas.

The MGS-460 can trigger additional audio-visual alarms and act as a standalone gas detection system, or integrate easily into a BMS / BAS or with Bacharach's optional MGS-408 Gas Detection Controller.

TECHNICAL DATA

PRODUCT ATTRIBUTES	DESCRIPTION		DEFINITION
Gases and Ranges	Refrigerants		1,000 ppm
	CO_2		5,000 / 10,000 / 20,000 / 30,000 / 40,000 / 50,000 ppm
	NH_3		100 / 1,000 / 5,000 / 100% LEL
	O_2		30 Vol%
	CO		500
	Combustible gases - Semiconductor (R-290, R-600, R-50, R-600a, HC-12a, R-717)		5,000 ppm
	Combustible gases - NDIR (R-600, R-50, R-290)		100% LEL
	Combustible gases - Catalytic (R-600, R-50, R-290, R-717)		100% LEL
	NO_2		20 ppm
Status Indicator	Single tri-color LED (green, red, orange)		
Buzzer	72dB @ 10 cm		
Output	Single configurable analog output		4 to 20 mA, 0 to 5 V, 0 to 10 V, 1 to 5 V, 2 to 10 V
	Digital		Modbus RTU via RS 485
Power Supply	24V AC or DC (auto selecting), 4W (max)		
Relay	Three relays, SPDT, fixed low / high fault alarms		
	Rating 2 A @ 30 VDC		
Enclosure	IP66		
Size (W×H×D) Approx.	General purpose (base)		6.5" × 6.5" × 3.4" (165 × 165 × 87 mm)
	Remote head		4.5" × 5.4" × 2.7" (115 × 136 × 68 mm)
Weight Approx.	1lb, 11.7oz (758 g)		
Approvals	CE, UL / CSA / IEC EN 61010-1		
Ambient Conditions	Temperature	Semiconductor	-40 to 122°F / -40 to +50°C
		Electrochemical	NH_3 100 / 1,000 ppm: -40 to 40°C
			NH_3 5,000 ppm: -20 to 40°C
			CO 500 ppm: -40 to 50°C
			NO_2 20 ppm: -20 to 40°C
			O_2 30% Volume: -20 to 50°C
		Infrared	-40 to 122°F / -40 to +50°C
		Catalytic Bead	-40 to 122°F / -40 to +50°C
	Humidity	5 to 90 % RH, non condensing	
	Pressure	23.6 to 32.5 inch Hg / 800 to 1,100 mbar	

For ordering information, visit us at www.mybacharach.com or contact your Bacharach sales manager.