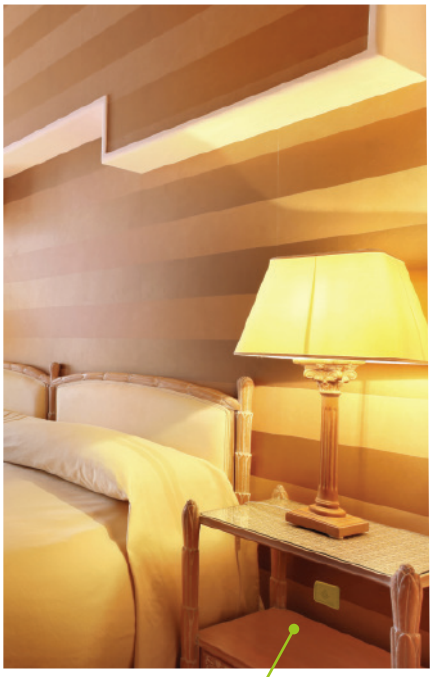

ALARM AND SYSTEM STATUS LED

Refrigerant Detector for Occupied Spaces
MVR-300™

FEATURES	BENEFITS
Fits in standard electrical boxes	Easy to install
Low profile/Flush mount	Aesthetically non-intrusive appearance
Two relays and Modbus Communications	Notify building management & initiate counter measures
Alarm options including: LED, buzzer, two levels, configurable delay and fail-safe	Alert occupants and remotely inform building management of alarm location for rapid response as required
Refrigerant specific sensor	Enhances safety[1] and minimizes refrigerant loss
Self diagnostics and simple field calibration	Easy to maintain
Unique plug-in field replaceable pre-calibrated sensor	Low cost of ownership
Compliant with EN 14624 and EN 378	Easily meet regulatory standards

DESCRIPTION

The MVR-300 detector is specifically designed to provide continuous monitoring for refrigerants associated with high-efficiency, high volume refrigerant cooling and heating systems, such as VRF/VRV (Variable Refrigerant Flow/Variable Refrigerant Volume) systems. Typical applications include hotels, dormitories, hospitals, office buildings, and apartment buildings.

The MVR-300 audible and visual alarms alert occupants and simultaneously communicate to Building Management Systems/Building Automation Systems (BMS/BAS). Two on-board relays can be used to close valves, activate alarm devices and exhaust fans or initiate emergency calls to rescue teams.

The on-board Modbus RTU interface provides real-time information about refrigerant concentrations, status and settings. It also enables custom configuration of the MVR-300 to any application specific requirements using multiple Modbus registers.

The MVR-300 is designed for easy installation and simple maintenance.

[1]***Important Note:*** *Large refrigerant leaks into occupied spaces can reach concentrations that pose a suffocation risk to the occupants. The MVR-300 is not designed to be used as the sole safety device for this risk. Safety of the occupants also must take a system designed approach that includes things such as ventilation, detection, early warning, mitigation and design redundancy.*

HOW TO CONTACT US:
Bacharach US Customer Service: +1 724 334 5000
Bacharach EU Customer Service: +353 1 284 6388
www.mybacharach.com

For more information about the MVR-300 and other Bacharach products scan here.

ORDERING INFORMATION

COMMERCIAL REFRIGERATION

REFRIGERANT	P/N	LOW ALARM*	HIGH ALARM*	RANGE
R-410A	6203-0001	500 ppm	2,000 ppm	2,500 ppm
	6203-0002	1,000 ppm	2,000 ppm	5,000 ppm
	6203-0003	2,000 ppm	4,000 ppm	10,000 ppm
R-407C	6203-0011	500 ppm	2,000 ppm	2,500 ppm
	6203-0012	1,000 ppm	2,000 ppm	5,000 ppm
	6203-0013	2,000 ppm	4,000 ppm	10,000 ppm
R-404A	6203-0021	500 ppm	2,000 ppm	2,500 ppm
	6203-0022	1,000 ppm	2,000 ppm	5,000 ppm
	6203-0023	2,000 ppm	4,000 ppm	10,000 ppm
R-32	6203-0041	500 ppm	2,000 ppm	2,500 ppm
	6203-0042	1,000 ppm	2,000 ppm	5,000 ppm
	6203-0043	2,000 ppm	4,000 ppm	10,000 ppm

*Factory default; can be changed through Modbus. Recommended 6 month testing/recalibration

TECHNICAL DATA

PRODUCTS ATTRIBUTES	DESCRIPTION	
Detectable Gases	R-32, R-404A, R-407C, R-410A	
Measuring Ranges	400 ppm - 2,500 ppm / 5,000 ppm / 10,000 ppm	
Housing	Flush mount, white ABS. Fits in most 2-gang electrical back-boxes	
Size (L x W x D, approx.)	6" x 4.1" x 1.75" (150 x 105 x 45 mm) including bezel	
Protection	Indoor: IP 40, NEMA	
Weight (approx.)	8 oz (230 g)	
Power	100 to 240 VAC, 50/60 Hz, 4W max	
Repsonse Time	R-32:	T50 - 20 s / T90 - 50 s
	R-404A:	T50 - 35 s / T90 - 70 s
	R-407C:	T50 - 20 s / T90 - 50 s
	R-410A:	T50 - 50 s / T90 - 2 min
Recovery Time	114 s	
Repeatability	+/- 5% of applied gas (concentration of calibration) at STP, +/- 10% FS across temperature and measuring range	
Indicator	Tri-color LED: green, amber, red	
Buzzer	80dB at 12" (30 cm)	
Relay	Two SPDT: low alarm and high alarm / fault, normal or fail-safe; configurable	
Alarm Delay	0 to 15 minutes; configurable 0, 5, 10, 15	
Wiring	Power: 3-core cable, 14 to 20 AWG (0.4 to 2.0 mm^2)	
	Relay: 3-core cable, 18 to 20 AWG (0.5 to 1.0 mm^2)	
	Modbus: 2-core twisted pair shielded cable 18 to 24 AWG	
Modbus RTU	Baud Rate: 9,600 or 19,200; configurable	
Environmental Conditions	Operating Temperature: 32 to 120°F (0 to 50°C)	
	Storage Temperature: 5 to 100°F (-20 to 40°C)	
	Humidity: 5 to 90% RH, non-condensing	
	Pressure: 23.6 to 32.5 inch of Hg (800 to 1,100 hPa)	
Elevation	0 to 6,560 ft. (2,000 m) altitude	
Sensor Life	2 year minimum life with recommended 6 month testing and / or recalibration	
Approvals	CE, UL/CSA/IEC/En 61010-1	