



## Refrigerant Detector for Occupied Spaces

Peace of mind when using high efficiency, high volume refrigerant systems.

# MVR-300™

## Benefits of Refrigerant Detection in an architecturally aesthetic design.

Designed to blend into any commercial décor, “invisible” to the Occupant. It enhances:

- Safety
- Compliance
- HVAC effectiveness
- Environmental protection
- Energy efficiency

**MVR-300™**



### Staying Comfortable

Modern refrigerant systems are designed to be efficient and leak free, but improper installations, inadvertent damage, or mechanical wear can result in leaks over time. The MVR-300 refrigerant detector helps keep the occupants comfortable in the conditioned spaces by providing early warning of refrigerant leaks over the service life of the HVAC system.



### Quietly Ready

The MVR-300 is always awake even as your occupants are sleeping, ready to respond with a configurable “silent” alarm and Modbus communication. Capable of communicating in the background, this leak detector can alert the facility manager or Building Management System (BMS) to identify the specific room and take immediate action.

### Leading the Industry and Ahead of the Codes

EN 378 and local codes such as BREEAM have continually evolved to address the safe and environmentally conscious use of refrigerants. The use of the MVR-300 in occupied, conditioned spaces can detect a refrigerant leak well before the RCL (Refrigerant Concentration Limit) with alarm set-points as low as 500 ppm to enhance safety.



REFRIGERATION

COMMERCIAL

The MVR-300 design benefits from its predecessor, our IAM-100. We have over 10 years of experience in refrigerant detection for occupied spaces and over 100 years of industry experience in the design & manufacture of gas instrumentation.



# THE COMPLETE SOLUTION

## for Refrigerant Detection in Occupied Spaces

### Easy to Install

Fits standard electrical boxes globally. Configured through easily accessible switches or programmable Modbus communication interface.



### Alarm Management

High and low alarm set points are factory preset. Corresponding high and low relay states are programmable, as well as, silent alarm, reset and delay.



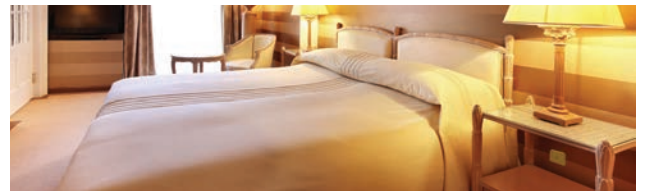
### Trouble Free Calibration

All gas detectors require periodic field testing and calibration. The MVR-300 offers an easy field calibration design and an exclusive plug-in field replaceable pre-calibrated sensor option.



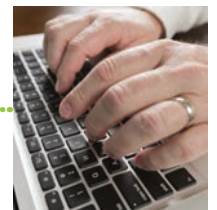
### Low Profile, Neutral Design

MVR-300 design includes a color neutral, low profile faceplate with programmable magnetic switches for a clean, tamper proof, button free look, blending easily into any décor.



### Communication & Self Diagnostics

Through relays or Modbus communication and the faceplate tri-colored LED, the MVR-300 continually communicates system, sensor and alarm status. A unique unit identifier can be tied to the HVAC control system identifying zone/location. Each unit's alarms and relays can be configured remotely through Modbus or directly with magnetic wand activated switches.



### Safety and the Environment

MVR-300 enables a comprehensive approach to refrigerant leak management ensuring comfort and safety for the occupants<sup>1</sup>, while reducing the environmental impact of HFC refrigerants.



**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.

# MVR-300

## ORDERING INFORMATION

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



## Also ask about our HGM-MZ for VRF applications.

Bacharach's HGM-MZ is among the most sensitive and reliable refrigerant detectors in the industry. As a 1 ppm infrared sensor based sampling system, it has been successfully used in many VRF applications. Its high sensitivity, inherent multi-zone sampling and Building Management System connectivity can be a cost effective alternative in commercial HVAC applications. Call the factory or visit our website for more information.

### HOW TO CONTACT US:

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



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THE MEASURABLE DIFFERENCE

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