



Bacharach® VRF Refrigerant Detection for Occupied Spaces

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



Benefits of VRF Refrigerant Detection... *in an architecturally aesthetic design.*



MSA Bacharach® MVR-300

Designed to blend into any commercial décor, *invisible* to the occupant. It enhances:

- Safety Compliance
- Energy Efficiency
- HVAC Effectiveness
- Environmental Protection
- Energy Efficiency

The MVR-300 design benefits from its predecessor, our IAM-100. MSA has 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.



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.



Industry Leading

ASHRAE 15 and ASHRAE 34 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 consistent with ASHRAE provisions for fixed refrigerant detectors to enhance safety.

Ordering Information

Refrigerant	Part Number	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-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

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.

The Complete Solution

for Refrigerant Detection in Occupied Spaces



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.



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.



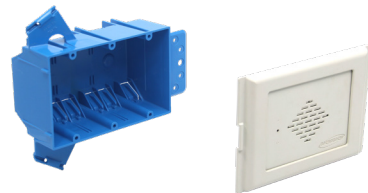
Cost Effective

Unique plug-in field replaceable pre-calibrated sensor for efficiency and low cost of ownership



Easy to Install

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



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.



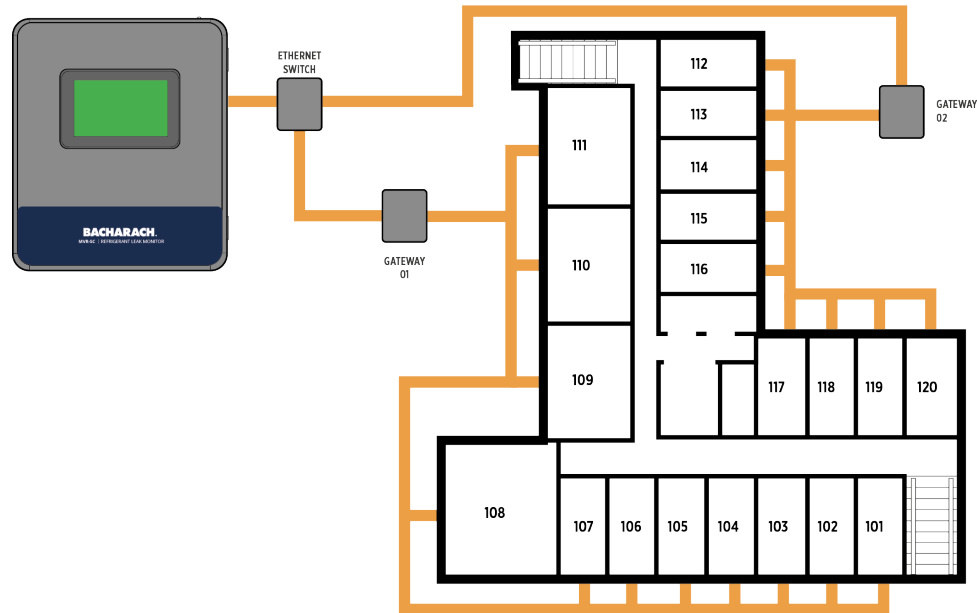
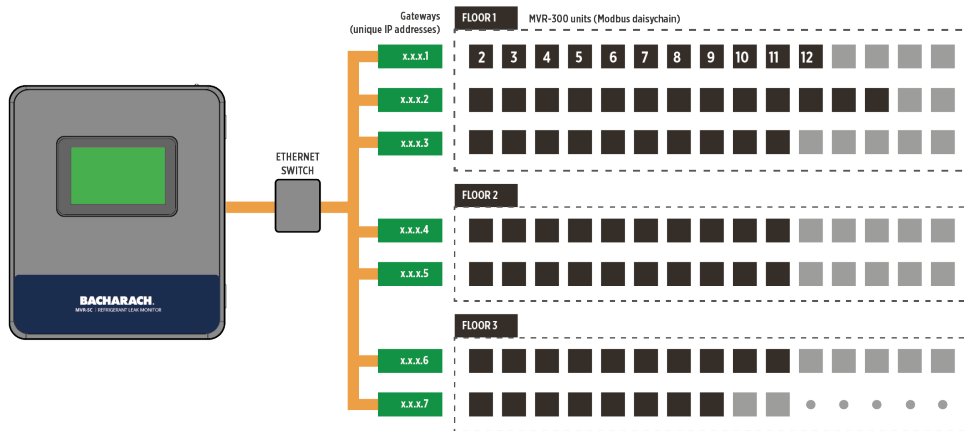
MSA Bacharach® MVR-300 MVR-SC Alarm Panel

The MVR-SC Alarm Panel provides centralized monitoring and alarming for multi-occupant applications utilizing the MVR-300™ VRF Refrigerant Leak Detector.

- Centralized monitoring for multi-occupant applications utilizing the MVR-300™ VRF Refrigerant Gas Detector
- At-a-glance visualization of whole system alarm, fault, or connectivity status
- Continuously monitors up to 100 connected devices for alarm and fault conditions, ensuring and warning in case of any disconnect
- Rolling event log of 100 most recent events (alarms, faults, connectivity, etc.) saved to SD card
- 1 Alarm Relay; 1 Fault Relay; automatic system action to be taken for fault or alarm condition via built-in relays
- Self diagnostics and simple field calibration for easy maintenance
- Commissioning via dynamic device pairing and remote Modbus auto-assign save

Hotel Control

Safely monitor VRF refrigeration systems in all rooms, by floor level and for the entire system from one single access control point.



Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

MSA operates in over 40 countries worldwide. To find an MSA office near you, please visit [MSAsafety.com/offices](https://us.msasafety.com/offices).