

BID SPECIFICATION FOR AUTOMATIC AND CONTINUOUS REFRIGERANT GAS AREA MONITOR FOR HOSPITALITY INDUSTRY

Provide a stationary refrigerant gas leak monitor system designed to alarm at a specified level of refrigerant gas in monitoring areas. The monitor equipment shall be self-contained wall mounted device that mounts flush to the wall in a 2-gang electrical back box, with onboard sensor, in the area where refrigerant gases are most likely to concentrate.

The refrigerant gas monitor shall meet the following specifications:

1. Coverage: single sensor onboard
2. Sensor Type: Semiconductor sensor.
3. Gases Detected: Refrigerants (HFCs, CFCs, and HCFCs, HFOs) such as R410A, R32, R404A, R407C
4. Detectable Range: 400 to 10,000 PPM
5. Alarm activation point: 500, 1,000 or 2,000 ppm (low alarm), and 2,000 or 4,000 ppm (high alarm)
6. Operating Temperature: 32°-102°F / 0°-50°C
7. Ambient Humidity: 0% to 90% RH (non-condensing).
8. Sampling Mode: continuous
9. Alarms: 2 levels
10. Power Status Indicator: Green LED
11. Alarm Status Indicator: Red LED, audible alarm, Modbus register
12. Fault Status Indication: Amber LED, Modbus register diagnostics
13. Alarms: onboard audible and visual alarm indicators, Modbus registers
14. Alarm silence switch: magnetic switch, activated by magnetic wand (included with device)
15. Alarm delay: user selectable 0, 5, 10, 15 minutes
16. Alarm reset: user selectable to be either manual or automatic
17. Audible Alarm shall be enabled or disabled via DIP switch or Modbus register
18. Power: 100-240 VAC, 50/60 Hz, 4W max.
19. Communications:

- i. 2 x SPDT relays: low alarm and high alarm / fault, normal or failsafe, configurable
- ii. Modbus RTU; Baud rate 9,600 or 19,200, configurable

20. Size: 6 x 4.1 x 1.75 inches – 8oz. (150 x 105 x 45 mm, 230g)

21. Certification: CE, UL/CSA/IEC/EN 61010-1

22. Manufacturer: Bacharach model MVR-300

23. Provide local alarm within the occupied space to sound if refrigerant vapor concentration exceeds threshold. Alarm shall provide a visual and an audible alarm with a sound pressure level of at least 80 dB at 12” (30cm).

24. Warranty: One (1) years.