

GAS & SPECIALTY SENSORS

BACHARACH REFRIGERANT (TUBE) GAS MONITOR

HGM-SZ



DESCRIPTION

The **Bacharach Model HGM-SZ Single Zone (tube) Refrigerant Gas Monitor** is designed for continuous monitoring of CFC, HFC, and HCFC refrigerants and halogen gases with a 1/4" O.D. tube up to 50 ft (15m) distance from measuring point to monitor. The unit features 30 pre-programmed refrigerants plus one custom gas. Three adjustable alarm levels with relay output designate leak, spill, and evacuation concentrations. Gas alarms and system fault conditions are indicated by visual and audible alarms. The **Model HGM-SZ** provides a system fault relay output and a 4 to 20 mA output for integration with remote monitoring equipment or building management systems.

The **HGM-SZ Single Zone (tube) Refrigerant Gas Monitor** is designed to be used as part of a control system that helps to prevent the formation of a hazardous environment when properly installed and maintained.

FEATURES

- 43 pre-programmed refrigerants and one custom
- Self diagnostics verify operation
- Three alarm levels with SPDT alarm contacts
- System fault alarm
- 200 data point logging
- 4-20 mA output signal
- 50-foot sampling tube and end filter included
- Local indication of current and peak gas levels
- Alarm-silence button
- NEMA 1

SPECIFICATIONS

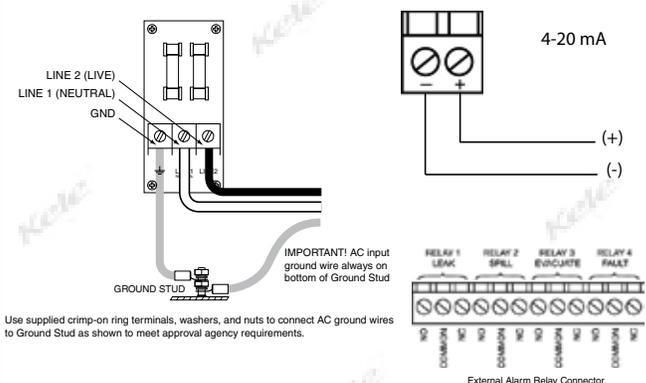
Supply Voltage	100 to 240 VAC, 50/60 Hz, 15 VA
Accuracy	±1 ppm ±10% reading
Signal Output	3 alarm relays, 1 fault relay, 240 VAC, 5A, (5% DIF) and 4-20 mA 500Ω (non-isolated)
Sensitivity	1 ppm
Measurement Range	0-10,000 ppm
Sensing Technology	Single pass, infrared non-dispersive
Gases Detected	R-11, R-12, R-22, R-23, R-113, R-114, R-123, R-124, R-125, R-134a, R-227, R-236fa, R-245fa, R-401a, R-402a, R-402b, R-404a, R-407a, R-407c, R-408a, R-409a, R-410a, R-500, R-502, R-503, R-507, R-508b, H-1211, H-1301, H-2404, N-1230
Warm Up Time	15 minutes
Response Time	9 to 90 seconds depending on sample tube length
Coverage	1/4" O.D. tube up to 50 ft (15m) from measuring point to monitor
Operating Temperature	32° to 122°F (0° to 50°C)
Operating Humidity	5% to 90% RH non-condensing
Enclosure Rating	NEMA 1
Dimensions	7.7"H x 3.6"D x 13.7"L (20 x 9 x 35 cm)
Weight	11.1 lb (5.0 Kg)
Approvals	UL file #E212266, CSA, CE
Warranty	2 years



INSTALLATION

The monitor should be located outside the mechanical room and readily accessible for verification and servicing. The end of the sample tube should be located as close as possible to the source of a potential leak.

WIRING



ORDERING INFORMATION

MODEL	DESCRIPTION
HGM-SZ	Single zone refrigerant monitor

RELATED PRODUCTS	
M1104KF	Replacement line end filter
NIOSHSCBA-WC	Self-contained breathing apparatus kit with SCBA-WALCASE wall case
UCK-1	Universal calibration kit for non-corrosive gases (N ₂ , CO ₂ , CH ₄ , H ₂ , O ₂ , CO, and refrigerants)
125-SS-2	Replacement charcoal filter*
Calibration Gases	CO, CO ₂ , NO ₂ , O ₂ , CH ₄ , NH ₃ , N ₂ , H ₂ S, H ₂ , and Refrigerants (See calibration page)
T-101	Tubing
*NOTE: Recommend replacing every six months	