INFRARED REFRIGERANT GAS DETECTOR

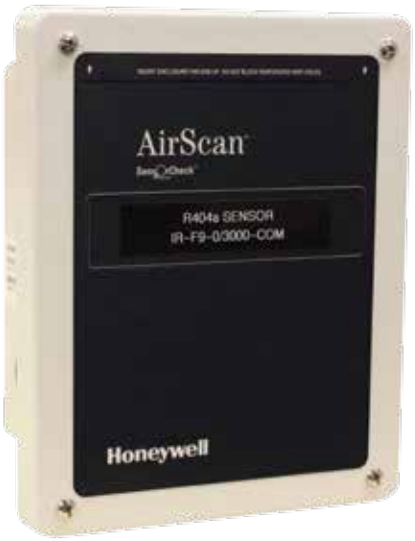
IR-F9 SERIES

Honeywell Analytics
experts in gas detection

MADE IN USA

DESCRIPTION

The **Honeywell Analytics IR-F9 Series refrigerant detector** is a highly accurate, affordable, micro-processor based infrared sensor that will provide years of reliable service. A true "diffusion" sensor, the **IR-F9 Series** does not require either the use of pumps or filters and allows all points of detection to be monitored perpetually. The versatile sensor is housed in a high mass metal bench structure that enables thermal stability and freedom from the effects of vibration.



IR-F9

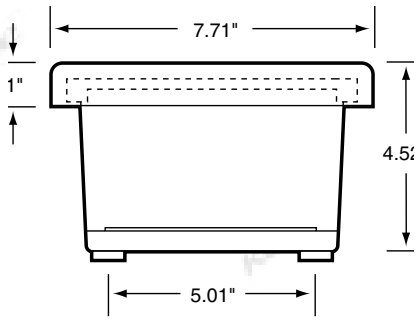
FEATURES

- ***Available in seven different refrigerants***
- ***R134a, R22, R404a, R407a, R410a, R422a, R507a***
- ***Visual indication***
- ***Infrared technology***
- ***4-20 mA output***
- ***Easy calibration with cal kit***
- ***No pump***
- ***Continual monitoring***
- ***Optional RS-485 Modbus communication***

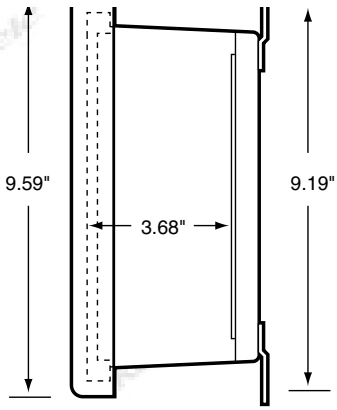
SPECIFICATIONS

Supply Voltage	24 VDC regulated 1.2A maximum
Accuracy	±3% full scale
Signal Output	4-20 mA @ 500Ω
Repeatability	1% full scale
Measurement Range	0-1000 ppm standard (0-500 ppm to 0 to 3000 ppm)
Sensing Technology	Dual infrared sensor
Calibration Interval	Every 6 months
Visual Indication	For testing and verification of 4-20 mA loop, calibration and operation
Response Time	10 seconds with full scale calibration gas @ 0.75 liters/ minimum flow rate
Gases Detected	R134a, R22, R404a, R407a, R410a, R422d, R507a
Operating Temperature	-20° to 140°F (-28° to 60°C)
Operating Humidity	0% to 99% RH non-condensing
Enclosure Rating	NEMA 4 fiberglass reinforced polyester
Dimensions	9.59"H x 7.71"W x 4.52"D (24.4 x 19.6 x 11.5 cm)
Weight	4.4 lb (2.0 Kg)
Warranty	1 year

MOUNTING DIMENSIONS



Top View



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IR-F9 SERIES

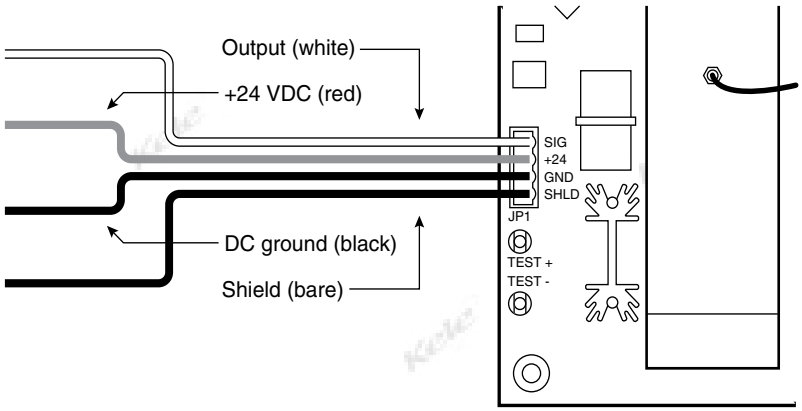
WIRING

White connects to signal input of monitoring equipment

Red connects to 24 VDC power supply positive side

Black connects to 24 VDC ground side

Bare wire wrap connects to case ground at monitoring equipment (earth ground)



INSTALLATION / OPERATION

Installation

The **IR-F9** can only report what it is seeing at the moment and it is very important the sensor be located where leaks are most likely to occur. CFC/HCFC/HFC vapor is heavier than ambient air, so in a room with no air movement it will tend to settle. For quickest detection, mount the sensor about one to two feet from the floor, close to the potential leak source. Be aware the indicated concentration may not be representative of personnel exposure and easy access for the required calibration and maintenance could be compromised. Some recommended considerations are as follows:

1. Must be easily accessible for calibration and maintenance.
2. Always mount the sensor vertically.
3. Mount the sensor close to the potential leak source for fastest possible leak detection.
4. Protect sensor from water, excessive humidity, and wash-down.
5. Always make a drip loop in the conduit.
6. Never mount sensor on a vibrating surface.

Operation

The **IR-F9** has two internal pushbutton(s), and two adjustment pots that are utilized for navigation of test functions, calibrations, and operating modes. In addition, a pair of test points is also provided that assist in the connection to standard meter leads for use in the upcoming calibration and diagnostic procedures.

*NOTE: The pushbutton(s) must be pressed the correct number of times and at the correct rate.

ORDERING INFORMATION

MODEL	DESCRIPTION
IR-F9-R134A	Stand-alone infrared refrigerant detector for R134a
IR-F9-R22	Stand-alone infrared refrigerant detector for R22
IR-F9-R404A	Stand-alone infrared refrigerant detector for R404a
IR-F9-R407A	Stand-alone infrared refrigerant detector for R407a
IR-F9-R410A	Stand-alone infrared refrigerant detector for R410a
IR-F9-R422D	Stand-alone infrared refrigerant detector for R422d
IR-F9-R507A	Stand-alone infrared refrigerant detector for R507a

RELATED PRODUCTS

DRM	Dual relay module
NIOSHSCBA-WC	Self-contained breathing apparatus kit with SCBA-WALCASE wall case
UCK-1	Universal calibration kit for non-corrosive gases (N2, CO2, CH4, H2, O2, CO, and refrigerants)
420MDBS	Interface module 4 to 20 mA to RS485 with Phoenix connector
Calibration Gases	CO, CO2, NO2, O2, CH4, NH3, N2, H2S, H2, and Refrigerants (See calibration page)

ACCESSORIES

DCP-1.5-W	Power supply, 24 VAC IN to 24 VDC OUT
DCPA-1.2	Power supply, 120 VAC IN to 24 VAC/24 VDC OUT