

TGOR Series

Value Recessed Refrigerant Sensor

Local alarm with control integration for VRF systems 0-5/10V/2 and 3-wire 4-20mA CO transmitter Relay, Thermistor outputs for temperature optional Sleek & functional low-profile design













DESCRIPTION

Designed for your VRF systems--ideal for hotel rooms and other environments requiring local leak detection. Local audible buzzer alarm, end-of-life indication for sensor element, and test function. Features a choice 0-5V, 0-10V, and 3-wire 4-20mA and thermistor outputs. Integrated alarm relay.

APPLICATIONS

Ideal for VRF systems

- Schools
- Hotels
- Mixed-Use
- · Multi-Family
- · Commercial facilities



Warning LED alarm with capacitive touch silence



Minimalist concept



Your brand, your product. Affordable highquality branding. Generate service calls for life.



Gasket seals element from wall drafts. 45 degree terminals for ease of wireing. save time and energy.



Calibration kit available



Buy American Act Certified



FEATURES

- Relay output for alarm indication
- Audible buzzer for local alarm
- Buzzer test button for safety checks

- End-of-life indication for sensor element
- 10 year life expectancy on elements
- Easy calibration mode
- Fits easily in standard single gang boxes

TG CALIBRATION: Order with CALKITHW-R to receive calibration fitting and regulator





ORDERING

TG

OR

Package

OR = Wall Mount (Recessed)

Gas Type

C=CO 2= R22

4 = R410A (Multi-Gas)

5 = R404A

6 = R407C

7 = R449A8 = R513A

9 = 1233ZDE

Output Type

A=0-5VDC, 3 Wire

B= 0-10VDC, 3 Wire

C= 4-20mA, 2 Wire*

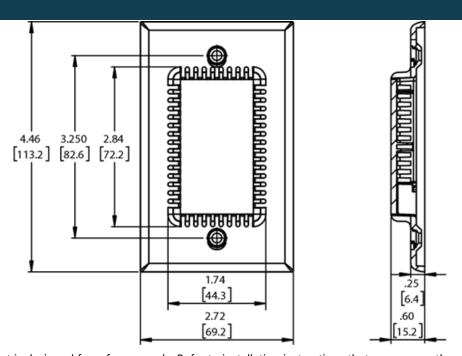
D= 4-20mA, 3 Wire



Scan here to see refrigerant cross-sensitivities



DIMENSIONS



A

Warning: The datasheet is designed for reference only. Refer to installation instructions that accompany the product and heed all safety instructions. Product improvement is a continuing process at Senva. Changes may occur to products without prior notice.



SPECIFICATIONS		
Power Supply		12-30VDC/24VAC(1), 24mA max
Analog Outputs	Analog outputs	0-10V, 0-5V, 2-wire or 3-wire 4-20mA (selectable)
	CO output scaling	0-200ppm
	Refrigerant output scaling	0-1000ppm
Alarm Relay	Relay characteristics	N.C. 1A@24/30VDC (50/60Hz) (no mains connection)
	CO alarm setpoint Refrigerant alarm setpoint	Activates above 30ppm for 1 hour or 70 ppm for 15 min Activates above 300ppm
LEDs	LED indicator CO	1 long blink above 30PPM, 1 short blink above 70 ppm
	LED indicator Refrigerant	1 long blink above 300PPM, 1 short blink above 600 ppm
	End-of-life Indicator	3 blinks at 30s intervals
Audible Alarm	Audible Buzzer CO	Activates above 30ppm for 1 hour or 70 ppm for 15 min
	Audible Buzzer Refrigerant	Activates above 300ppm for 1 hour or 600 ppm for 15 min
	Buzzer level	82 dB
	Alarm Test	Hidden button provided for buzzer test
CO Sensor Performance	Туре	Electrochemical
	Accuracy	±5%
	Resolution	1ppm
	Certifications	UL2034 Listed Component
	Life expectancy	>7 years
	Coverage Area	5000-7500 square feet
	Calibration Interval	Annually, hold test button for 10s to enter cal mode
Refrigerant Sensor Performance	Туре	MOS
	Resolution	1ppm
	Life expectancy	>10 years (typical life expectancy of MOS sensors)
	Calibration(2)	Calibrated to selected refrigerant
	Sensitivity of R134A calibrated device	@300ppm test gas: 450ppm R410A, 425 ppm R407C, 400ppm R404A, 370ppm R22, 300ppm R134A
	Other detectable gases(3)	R407A, R407F, R427A, R452B, R507, R448A, R449A, R422A, R422D, R452A, R513A, R514A, R32
	Coverage Area	5000-7500 square feet
	Calibration Interval	6 months, hold test button for 10s to enter cal mode
Operating Environment	Humidity	15-95% continuous, 0-95% intermittent
	Max Elevation(4)	2629 m (8625 ft)
Enclosure	Dimensions	4.45"h x 2.7"w x 0.5"d (depth measured from wall)
	Unit Temp Rating	-4 to 122oF (-20 to 50oC)
Compliance		CE, RoHS

⁽¹⁾ One side of transformer, secondary is connected to signal common. Dedicated transformer is recommended. 15-30VDC/24VAC power supply voltage required for 10 volt output.

⁽²⁾ R134A sensor is factory calibrated to R134A gas but may be used as a general purpose refrigerant sensor. Sensitivity to some other gases can be found at Senva.com (see QR code on left). Actual response may vary depending on installation. For more accurate response to a specific gas, a unit may be field calibrated. (3) These gases my be detected by the sensor but sensitivity curves are not available at this time.

⁽⁴⁾ Refrigerant sensors have been tested to perform at this altitude. To maintain accuracy spec, a field calibration is recommended.

^{*} Product improvement is a continual process at Senva and product features and specification may change without prior notice. Refer to instructions that accompany the product for installation and wiring.