

GAS & SPECIALTY SENSORS

CARBON MONOXIDE SENSOR KCO SERIES



DESCRIPTION

The Kele KCO Series Carbon Monoxide Sensors are available in analog or relay versions. The sensors are provided in heavy-duty steel enclosures, and the sensors use low-temperature components that are ideal for open parking garages in cold climates.

The KCO Series Carbon Monoxide Sensors 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. For more information on the proper application and use of this product please read "Environmental Safety Devices" in our technical reference section.



KCO-R-H



KCO-A-H

Note: Front covers are blank

FEATURES

- Two-stage alarming (KCO-R)
- 0-200 ppm 4-20 mA output (KCO-A)
- Microprocessor controlled recalibration (KCO-A)
- Heavy-duty enclosures
- Operating temperature down to -4°F (-20°C)
- Low-temperature option available -20°F (-29°C)
- Temperature and humidity compensated

SPECIFICATIONS

Supply Voltage		Visual Indication	
KCO-A	24 VAC @ 5 VA ±20% (LT option 30 VA)	Status	Green
KCO-R	24 VAC @ 10 VAC ±20% or 24 VDC	Fault	Red
Signal Output (KCO-A)	4-20 mA @ 500Ω	Warm Up Time	1 minute
Accuracy	±5% or 5% of reading whichever is greater	Response Time	<35 sec
Measurement Range		Time Delay (KCO-A)	10 minutes
KCO-A	0-100/200/400 ppm, jumper selectable	Relay Output (KCO-R)	120 VAC, 2A resistive
KCO-R	0-250 ppm	Alarm Setpoints (KCO-R)	Warning 50 ppm, alarm 100 ppm (reset 5-10 ppm change)
Sensor Technology	Solid-state metal oxide semiconductor	Operating Humidity	5% to 95% noncondensing
Sensor Life Expectancy	10 years	Operating Temperature	-13° to 122°F (-25° to 50°C)
		Weight	2.0 lb (0.9 Kg)
		Warranty	1 year

INSTALLATION

KCO-R

The KCO-R is a two-stage carbon monoxide sensor with a relay output for each stage. If the CO level rises above the warning stage setpoint for over 30 seconds, the warning relay, amber warning LED, and a three-minute minimum "on" timer will activate. Once below the setpoint, the relay and LED will reset. If the concentration continues to rise and exceeds the alarm stage setpoint for 10 minutes, the alarm stage relay and red LED will activate. Calibration of the unit requires the application of a **hydrated** test gas.

KCO-A

The KCO-A is a microprocessor-controlled sensor with a 4-20 mA analog output based on a 0-100/200/400 ppm sensing range. The microprocessor controls the heating of the sensor and subsequent reading of the CO level. The microprocessor compensates for any drift in the sensor over time. The microprocessor system includes self-diagnostic, self-restarting, and remote failure reporting. The output signal will drop below 4 mA if a fault is discovered. If power problems cause the unit to malfunction, the unit will self-check and restart. Calibration of the unit requires the application of a **hydrated** test gas, and the push of a button performs the recalibration.



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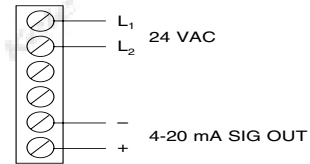
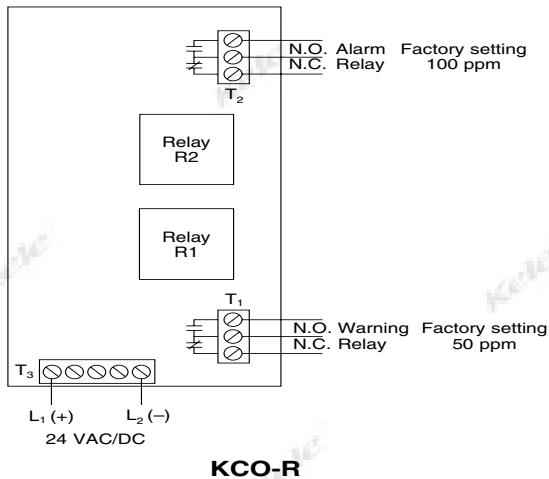
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INSTALLATION

The **KCO Series** senses levels of CO for up to 5000 ft² (465m²) of coverage if there is normal air circulation within the area. Mount on a wall or column approximately 5' (1.52m) above the floor. The sensors should not be mounted in corners where airflow could be restricted.

CAUTION: Not for diesel fume applications.

WIRING



ORDERING INFORMATION

MODEL	DESCRIPTION
KCO	R Relay output carbon monoxide sensor
	A Analog output carbon monoxide sensor
	H Hinged-cover enclosure
	LT Low-temperature option -20°F (-29°C)

KCO - R - H - LT

Example: KCO-R-H-LT Carbon monoxide sensor with relay output, low temperature options

RELATED PRODUCTS

GAS-CO-25	25 ppm carbon monoxide (CO) in air, 17L
GAS-CO-50	50 ppm carbon monoxide (CO) in air, 17L
GAS-CO-100	100 ppm carbon monoxide (CO) in air, 17L
GAS-CO-200	200 ppm carbon monoxide (CO) in air, 17L
GAS-CO-250	250 ppm carbon monoxide (CO) in air, 17L
UCK-1	Universal calibration kit for non-corrosive gases (N ₂ , CO ₂ , CH ₄ , H ₂ , O ₂ , CO, and refrigerants)

ACCESSORIES

691-K0A	Control transformer, 120:24 VAC, 40 VA, Class 2
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

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