Carbon Monoxide Detector

12-24SIR

Carbon Monoxide (CO) is a toxic odorless, tasteless, colorless gas that is present whenever organic compounds are involved in combustion. Many facilities utilize propane, natural gas or wood for heat, laundry and cooking purposes and the burning of these fuels produce CO. A malfunctioning appliance or flue will fill a space with this toxic gas completely unknown to the occupants.

The Advanced 12-24SIR utilizes premium Carbon Monoxide (CO) detection technology for accurate detection and false alarm immunity. The 12-24SIR will only respond to the presence of CO and will not react to other ordinary chemicals that affect other detectors.

If the 12-24SIR CO detector senses CO gas at its preset levels the red indicator/test button LED will turn on for 2 seconds and off for 4 seconds and then illuminate steady. The alarm Form C relay contact will transfer and the 12-24SIR CO detector's local integral 85 dB sounder (piezo) will emit a temporal 4 pattern (4 short beeps for 1 second, off for 5 seconds and repeat). This localized tone will continue until there is no longer CO gas present. If the local indicator/test button is pressed it will silence the local sounder (piezo) for four (4) minutes. If CO gas is still present the sounder (piezo) will reactivate and will not be silenceable from the local indicator/test button again.

The 12-24SIR CO detector operates on 0-28 VDC supplied by the Axis^{AX} Series Intelligent Fire Alarm Control Panel. In addition to a tamper resistant locking pin, the 12-24SIR CO detector monitors the sensor and detects if an internal problem exists. If a fault occurs within the CO detector, the sounder (piezo) will beep and the indicator/test button LED will flash twice every 30 seconds. This is an indication of a malfunction and that the CO detector requires service.

By monitoring the CO detectors alarm and trouble contacts with an Advanced intelligent monitoring module, the Axis^{AX} Series Intelligent Fire Alarm Control Panel will provide status of the operational state of the 12-24SIR CO detector. In addition, the Axis^{AX} Series Intelligent Fire Alarm Control Panel can be programmed to generate an alarm or supervisory event when the 12-24SIR CO detector is active.

Unique Features:
- 12 or 24 VDC Power Input
- Continuously Self-Tests Every 10 Minutes
- Form C Alarm and Trouble Relay Contacts
- 85dB @ 10' Sounder (Piezo)
- Low Current Draw

Features:
- Wall or Ceiling Mount
- Screw Terminal Connections
- Six (6) Year Warranty
- Red Status LED
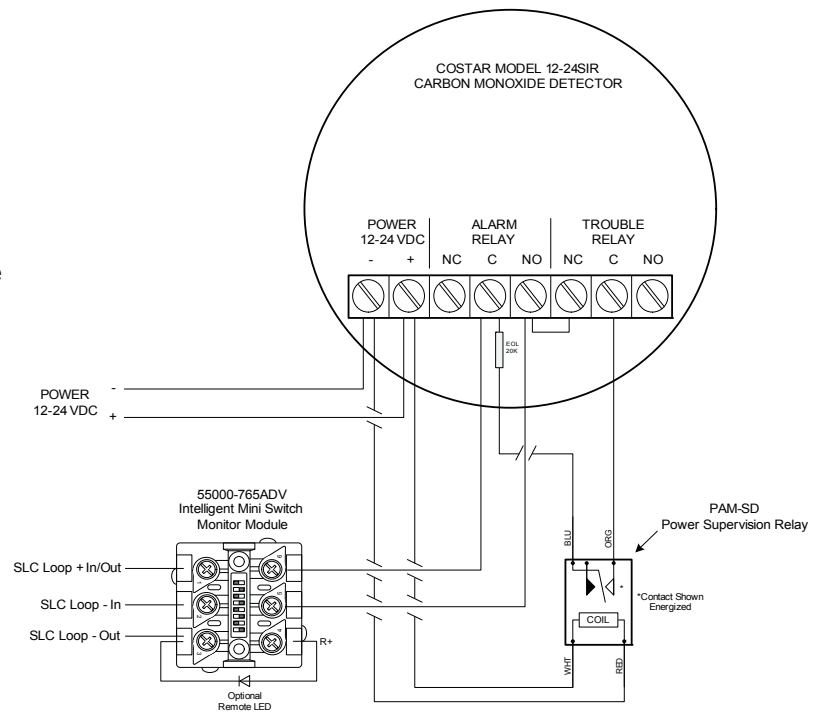- Tamper Resistant Locking Pin
- Integral Test Button

Listings and Approvals:
- UL 2075: file FTAM.E186246
- NYCFD MEA 12-05-E Vol. II

The 12-24SIR has a 6 year warranty and life span. After 6 years, the detector needs to be replaced.

In normal operation the red indicator/test button LED flashes once every 30 seconds, indicating that the 12-24SIR CO detector is powered and active.

An integral test button is provided on the 12-24SIR CO detector, the test button when activated will chirp the sounder (piezo) then test the 12-24SIR CO detector's operation and the red LED will flash 4-6 times. At the completion of the test, the sounder (piezo) will activate two rounds of the temporal 4 tone.

COSTAR MODEL 12-24SIR
CARBON MONOXIDE DETECTOR

POWER 12-24 VDC — +

ALARM RELAY — NC C NO

TROUBLE RELAY — NC C NO

EOL 20K

POWER 12-24 VDC

55000-765ADV
Intelligent Mini Switch
Monitor Module

SLC Loop + In/Out
SLC Loop - In
SLC Loop - Out

R+

Optional Remote LED

PAM-SD
Power Supervision Relay

*Contact Shown Energized

COIL

BLU ORG WHT RED

12-24SIR CO Detector Specification Details

Sensitivity Response	
30 ppm (parts per million)	No response for 30 days
70 ppm (parts per million)	Within 60 to 240 minutes
150 ppm (parts per million)	Within 10 to 50 minutes
400 ppm (parts per million)	Within 4 to 15 minutes
Operating Voltage	10 - 28 VDC
Current Draw	
Quescent	60 µA
Alarm/Trouble	25 mA (80mA maximum)
Relays	
Alarm	Form C, 0.1A @ 30 VDC (non-latching)
Trouble	Form C, 0.1A @ 30 VDC (non-latching)
Operating Temperature	40^0 F - 100^0 F (4.4^0 C - 37.8^0 C)
Operating Humidity	15 - 95% RH
Sounder (Piezo) Volume	86 dB @ 10 ft
Sounder (Piezo) Alarm Tone	Temporal 4
Wiring Terminal Size	14 - 22 AWG

Ordering Information

12-24SIR	Carbon Monoxide Detector
PAM-SD	Form C SPDT Power Supervision Relay

 Advanced

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