



REDBAN

CO540 CARBONMONOXIDE DETECTOR INSTALLATION AND USER MANUAL



CO540 ADDRESSABLE CARBON-MONOXIDE GAS DETECTOR

INSTALLATION AND USER MANUAL

SPECIFICATIONS

Loop Operating Voltage	:16 - 30 VDC
Loop Operating Current	:<600µA @ 24 VDC (Including Led blink in every 8 seconds)
Maximum Alarm Current	:<7 mA @ 24 VDC (Indicator included)
Operation Humidity	: 10% - 93% Relative Humidity, Non-Condensing
Operation Temperature	: -10°C - +50°C
Coverage Area	: maximum 50 m ³
Alarm Threshold	: 50ppm (Carbonmonoxide)
Relay Contact Rate	:200mA @24Vdc
Dimensions	:90 x 90 x 38 mm
Weight	:110 grams

GENERAL



The CO540 Addressable Carbon-monoxide Gas Detector is designed to detect gas leaks in indoor areas according to the density level and to report these density levels to the CO-016 Addressable Carbon-monoxide Detection and Control Panel.

The LED on the device turns off in 8 second periods while the device is in state. Stays lit in alarm condition.

The CO540 Addressable Carbon-monoxide Gas Detector is fed from the loop line. It does not need an external power supply. Only loop line connection is sufficient.

INSTALLATION

The carbon-monoxide gas detector is used in common areas such as residences, offices, shops, apartments, parking lots, warehouses where the relevant gas is used or likely to occur, or in sections such as kitchens, bathrooms, heating rooms, heating centers.

The CO540 Carbon-monoxide Gas Detector assembly should be installed within human breathing distance. Usually the recommended distance is 150 cm above the ground. Carbon monoxide is a poisonous gas and weighs close to the weight of air. For this reason, it will give the most accurate result if the detector is at human breathing height since it will be dispersed homogeneously with the air. Carbon monoxide gas is mostly produced as a result of the combustion process. For this reason, when determining the detector location, care should be taken to ensure that it is close to the source that may generate carbon monoxide.

When determining the place where the CO540 Carbon-monoxide Gas Detector will be installed, a place where normal air circulation is not hindered should be selected. It should not be placed on stoves or stoves to prevent false alarms. It should be placed 50cm to the right or left of the appropriate height.

The cover of the CO540 Carbon-monoxide Gas Detector is opened by unscrewing the 4 screws on the cover. It can be mounted to the desired location from the screwing points on the inside.

WIRING

The CO540 Carbon-monoxide Gas Detector requires no external power supply. The cables coming from the loop should be connected to any of the (+) terminals and the (-) terminal to any of the (-) terminals, paying attention to their polarity. If there is a second device, it should be connected to its (+) and (-) terminals by making a cable connection to the other (+) and (-) terminals that remain idle, otherwise it should be connected to the (RETURN) terminals of the panel, again paying attention to its polarity. **Before these connections are made, address assignment must be made with the detector PP1201 addressing device.** If the address is not assigned, the device will not be found in the scan made on the panel.

There is a relay output in the normally open (NO) position on the device. This relay output is automatically activated in case of an alarm and turns off (NC). If it is desired to detect the detector with an indicator or to operate an audible alarm device, the desired device can be switched with this relay.

When making the cable connections of the CO540 Carbon-monoxide Gas Detector, a cable with a cross section of 0.8 mm² or 1.5 mm² should be used, taking into account the cable distance to be used. While wiring, different colored cables will prevent confusion in the system and facilitate detection in case of malfunction.

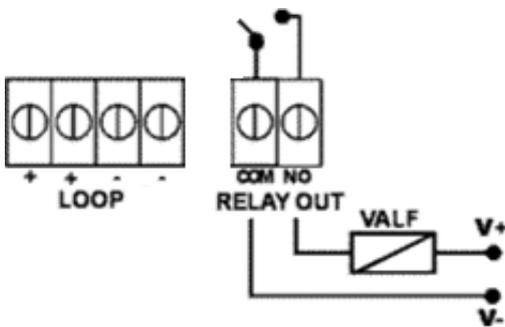


Figure 1 CO540 Addressable Carbon-monoxide Detector Cable Connections

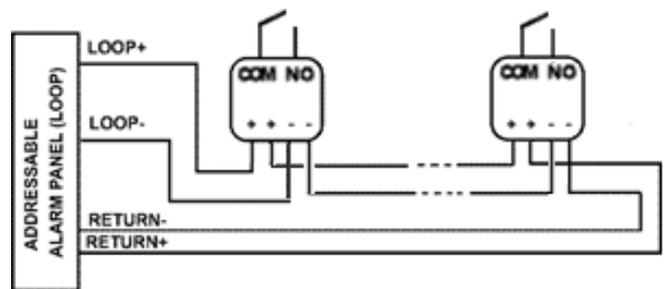


Figure 2 Multiple Device Connections

OPERATION AND TEST

If the CO540 Addressable Carbon-monoxide Detector is connected to the loop after address assignment is made with the addressing device, if scanning is done on the panel, the device will be found. After this scanning process, the led on the device will flash every 8 seconds. It can be detected by this LED that it is in working condition.

The device detects gas continuously in operating state, and when the detected gas exceeds the threshold levels determined in the panel menu, the 1st Level led on the panel and then the 2nd Level led will turn on, respectively. Finally, the Carbon-monoxide panel will go into alarm when the detector exceeds the alarm threshold level. If the detected gas level in the first two levels decreases, the system will return to normal without going into an alarm state. However, if the detector exceeds the alarm threshold level, all functions of the system are activated.

When the device is wanted to be tested, the relevant device is taken to the test position via the panel. In this position, the relevant gas is applied to the sensor at the bottom of the device and the device is expected to be activated. While in the test mode, the system will not enter the alarm state, but the detection level values on the panel screen can be followed. It can also be tracked from event logs.

ALARM CONDITION

In the event of an alarm, the Carbon-monoxide panel will activate the ventilation equipment in the environment in line with the information from the detector. Since carbon-monoxide gas is a tasteless, colorless, odorless and poisonous gas, you should leave the place as early as possible.

CAUTIONS

The location and installation of the CO540 Carbon-monoxide Gas Detector should be done by experts or authorized service personnel.

Do not pay attention to electrical leakages from the power wiring that may oppose the systems used in the device. While there is energy in the system, you are prevented from intervening in the system for a malfunction. Keep away from children.

Do not allow the device to be opened except by qualified personnel. If the device needs to be intervened, please request service.

Alcohol, volatile substance vapors, sprays, very dense cigarette or similar smoke, lighter gas, sharp-smelling deodorant, all kinds of paints, cleaning materials may mislead the device and cause false alarms.

The gas sensor is semiconductor and has a lifespan of 5 years. When the usage period of the device exceeds 5 years, it must be replaced with a new device.

Carbon monoxide gas is a tasteless, colorless, odorless and poisonous gas. Initial symptoms are headache, tiredness and fatigue, shortness of breath, nausea and dizziness. If you have been exposed to carbon-monoxide gas and you are showing symptoms, seek medical attention immediately.

Points to note during transportation and transport:

The product should be stored indoors in the package. The storage and storage temperature range is -30°C to $+60^{\circ}\text{C}$. The product must be transported, kept in storage and in closed carton. The care should be done to protect against falling, snatching and humidity.

WARRANTY

CO540 Carbon Monoxide Gas Detector is guaranteed to be used in accordance with the instructions contained in this user manual, with the condition that it is recorded and warranted for 2 years. In order for the warranty rights to be valid, an authorized service certificate must be applied with the guarantee document approved by the vendor within the warranty period.

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