**CO1224T/CO1224A**

**Conventional Carbon Monoxide Detector**

**General**

Carbon monoxide (CO) is an odorless, colorless, tasteless and highly toxic gas that is produced when fuels, such as wood, gasoline, charcoal and oil, are burned with insufficient air. The majority of residential and commercial fatalities caused from these fuels come from heating systems, power tools and charcoal grills.

If carbon monoxide is detected, the CO1224T will alert by sounding and flashing a Temp-4 signal alarm. Protection is guaranteed 24/7 by a central station if connected to a panel with a digital alarm communicator.

The CO1224T is specifically designed for system operation. This means the detector is fully listed to UL Standard 2075, offering a code required trouble relay, which sends a sensor failure or end-of-life signal to the control panel and the central station, as well as SEMS-type terminal Phillips-head screws, which provide a quicker and more positive wiring connection and code required wiring supervision. Also, the offers low current draw, allowing more detectors to be connected to the panel without having to purchase a more expensive panel or an extra power supply.

Add addressability to the by supervising the circuit with a compatible monitor module such as the MMF-301(A).

Special to the CO1224T is RealTest™ technology that allows testing of its internal CO detector with a carbon monoxide gas agent. There are few steps: Hold the test button for two seconds, and after the green LED begins to flash about once per second, spray a small amount of CO into the detector. The detector will alarm to indicate presence of gas.

**Features**

- RealTest™ technology allows installer to test detector with CO gas.
- Full compliance with UL 2075.
- A code required trouble relay.
- Wiring supervision with SEMS terminals.
- A six-year end-of-life timer.
- 12/24 VDC.
- A current draw of 20mA in standby and 40mA in alarm.
- Versatile mounting for wall and ceiling.
- Electrochemical sensing technology.

**Specifications**

**ARCHITECTS'/ENGINEERS' SPECIFICATIONS**

Carbon monoxide detector shall be a System Sensor model number , listed to UL 2075 for Gas and Vapor Detectors and Sensors. The detector shall be equipped with a sounder and a trouble relay. The detector’s base shall be able to mount to a single-gang electrical box or direct (surface) mount to the wall or ceiling. Wiring connections shall be made by means of SEMS screws. The detector shall provide dual color LED indication, which blinks to indicate normal standby, alarm, or end-of-life. When the sensor supervision is in a trouble condition, the detector shall send a trouble signal to the panel. When the detector gives a trouble or end-of-life signal, the detector shall be replaced.

**ELECTRICAL SPECIFICATIONS**

**Operating Voltage:** 12/24 VDC  
**Audible Signal:** 85 dB in alarm  
**Standby Current:** 20 mA  
**Alarm Current:** 40 mA (75 mA test)  
**Alarm Contact Ratings:** 0.5 A @ 30 VDC  
**Trouble Contact Ratings:** 0.5 A @ 30 VDC

**PHYSICAL SPECIFICATIONS**

- **Size:** 5.1”L x 3.3”W x 1.3”H  
- **Approximate Weight:** 7 oz  
- **Operating Temperature Range:** 0°C to 40°C (32°F to 104°F)  
- **Operating Humidity Range:** 22% to 90% RH  
- **Input Terminals:** 14 to 22 AWG  
- **Mounting:** Single-gang backbox; surface mount to wall or ceiling.

**Operation Modes**

<table>
<thead>
<tr>
<th>Operation Mode</th>
<th>Green LED</th>
<th>Red LED</th>
<th>Sounder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal (Standby)</td>
<td>Blink 1 per minute</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Alarm</td>
<td>–</td>
<td>Blink in Temporal 4 pattern</td>
<td>Sound in Temporal 4 pattern</td>
</tr>
<tr>
<td>RealTest™</td>
<td>Blink 1 per second</td>
<td>–</td>
<td>–</td>
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**Hush Feature:** Pushing the Test/Hush button will silence the sounder for 5 minutes (except in RealTest mode).
Trouble Feature: When the detector is in a trouble condition, it will send a trouble signal to the panel via the trouble contact.

End-of-Life Timer: After the sensor inside the detector has reached the end of its useful life, a trouble signal will be sent to the panel. This will indicate that it is time to replace the detector. An electrochemical carbon monoxide detector life span is approximately six years, and the detector must be replaced by the date marked on the inside of the product.

MONITOR MODULE APPLICATIONS
When used in conjunction with the CO1224T, the monitor module should be programmed as a supervisory device type and is not suitable for evacuation purposes. Wire the module as an NFPA Style B (Class B) Initiating Device Circuit and terminate the with a 47K ohm End-of-line resistor (provided).

Listings and Approvals
The listings and approvals below apply to the CO1224T. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL Listed: E307195

Product Line Information
CO1224T: 12/24 volt, 4-wire system-monitored carbon monoxide detector with RealTest™ Technology. Replaces CO1224.
CO-PLATE: CO detector replacement plate, package of 5. Covers previously installed round detectors' footprints for a clean, low-profile finish.