

# CARBON MONOXIDE ALARM

CAT. **CO5120BN**



## INTELLIGENT SENSING TECHNOLOGY™

Microprocessor controlled - reduces the number of non-emergency or unwanted alarms.

## LATCHING ALARM INDICATION

Microprocessor controlled - Automatically identifies initiating alarm, even after alarm condition has subsided.

## SMART INTERCONNECT

Interconnectable to both BRK Smoke and CO Alarms

## TWO SILENCE FEATURES

Can silence the low battery chirp for up to eight hours or temporarily silence an unwanted alarm.



TM

# BRK ELECTRONICS®

## 120V AC/DC, 60Hz Wire-in with 9V Battery Back-up

### Description:

The BRK Electronics® Cat. No. CO5120BN is a wire-in, 120 VAC/DC, 60Hz with 9V battery backup single and/or multiple station carbon monoxide alarm specifically designed for residential and institutional applications including sleeping rooms of hospitals, hotels, motels, dormitories and other multi-family dwellings. Model CO5120BN complies with UL2034, NFPA720, HUD, FHA and other agencies that model their codes after the above agencies. It meets building codes where AC/DC carbon monoxide alarms are required.

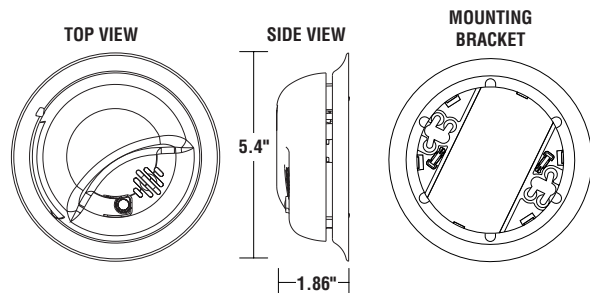
BRK Electronics® CO5120BN features a permanently installed CO sensor, Intelligent Sensing Technology™ for fewer unwanted alarms, an 85dB horn, a 9V battery backup power supply, an easy access side-load battery drawer, two silence features: unwanted alarms and low battery silence and is interconnectable with up to 18 devices including both BRK Smoke and CO Alarms. The "Smart Interconnect" feature allows the unit to be interconnected to BRK smoke alarms. If there is a smoke event, the CO5120BN horn pattern will emit the same sound as a smoke alarm, that is 3 beeps, pause, 3 beeps, pause. If there is a CO event, the interconnected CO alarms will sound with their normal horn pattern. The unit features "Latching Alarm Indication". When interconnected in series, the unit that triggered the alarm rapidly flashes its red LED indicator. After the alarm condition subsides, the initiating unit will store in memory or "latch" the information and begin to flash once every 5 seconds. The red LED indicators remain off on all other interconnected units. The unit mounts to any standard 4" junction box. Keyhole slots in the mounting bracket eliminate the need to remove the junction box screws for installation. Battery installation and removal can occur while the unit is mounted to the ceiling or wall via the side load battery compartment. Two locking features are provided to discourage battery theft and/or theft of the unit. Connection to AC power is made with a "Quick-Connect" wiring harness. Installation is quick, easy and cost effective.



BSI Registered Firm—Certificate #FM21268



**120V AC/DC, 60Hz Wire-in with Battery Back-up**



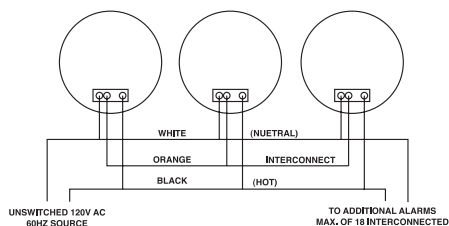
**ARCHITECTURAL AND ENGINEERING SPECIFICATION:**

The carbon monoxide alarm shall be BRK Electronics Model CO5120BN and shall provide at a minimum the following features and functions:

1. A permanently installed carbon monoxide sensor.
2. Powered by 120V AC, 60Hz and have a monitored 9V battery backup. In battery backup mode, the battery must last for 8 hours minimum in standby, 12 hours minimum in alarm, and 7 days trouble.
3. A visual LED (red) power-on indicator to confirm unit is receiving power or to confirm unit has switched to battery backup mode.
4. The sensor is adjusted not to detect CO levels below 30 PPM and will not alarm when exposed to constant levels of 30 PPM for 30 days. It will alarm at the following levels under 30% to 70% relative humidity: 400 PPM CO between 4 and 15 minutes, 150 PPM CO between 10 and 50 minutes and 70 PPM CO between 60 and 240 minutes.
5. A test/silence button to check all detector functions and to silence any unwanted alarms. In addition, the unit shall have a low battery silence feature to quiet the low battery chirps for up to 8 hours.
6. The unit shall perform self diagnostic tests every second and issue an audible malfunction warning (three rapid chirps) if the unit malfunctions.
7. A solid state piezo horn rated at 85dB at 10 ft. that provides a repeating horn pattern: 4 beeps, pause, 4 beeps, pause.
8. A "Smart Interconnect" feature allows the unit to be interconnected to BRK smoke alarms. If there is a smoke event, the CO5120BN horn pattern shall emit the same sound as the smoke alarm, that is 3 beeps, pause, 3 beeps, pause. If there is a CO event, the interconnected CO alarms shall sound their normal horn pattern.
9. The unit shall be capable of operating between 40°F (4°C) and 100°F (38°C) and relative humidity between 10% and 90%.
10. The unit shall center mount to any standard electrical junction box up to 4" size without screw removal and shall be listed for wall or ceiling mounting.
11. The unit shall have an optional locking mechanism to discourage theft of battery and/or theft of the unit.
12. The unit shall have a plug in connector and be capable of interconnection of up to 18 alarms.
13. The unit shall at a minimum meet the requirements of UL2034, NFPA 720, ICBO, BOCA, SBCCI, CABO

**INSTALLATION OF CO ALARM**

Installation of this CO alarm must conform to all local electrical codes and Article 760 of the National Electrical Code (NFPA 70) and NFPA 72. Interconnected units must meet the following requirements: Total length of wire interconnecting units should be less than 1000 feet, be #18 gauge or larger and be rated at least 300V. It is recommended that all units be on the same fuse or circuit breaker. If local codes do not permit, be sure the neutral wire is common to both phases. Only those BRK Electronics catalog numbers listed in the "Technical Specs" section under "Interconnection" may be connected to these CO alarms.



**TECHNICAL SPECS:**

|                   |   |
|-------------------|---|
| Alarm Dimensions  | 5.40" dia x 1.86"H  |
| Weight            | 6.4 oz  |
| Operating Voltage | 120V AC 60Hz w/ 9V battery backup   |
| Operating Current | 0.09 amps (standby/alarm)   |
| Temperature Range | 40°F (4°C) to 100°F (38°C)  |
| Humidity Range    | 10% to 90% relative humidity (RH)   |
| Audio Alarm       | 85dB at 10 feet   |
| Test Button       | Electronically simulates carbon monoxide condition, causing the unit to alarm.  |
| Alarm Reset       | Automatic when CO clears. Press test/silence button to reset manually.  |
| Interconnections  | 18 total with CO Alarms: CO5120PDBN, CO5120BN. Smoke Alarms: SC6120B, 4120, 4120B, 4120SB, 4120AB, 4120SAB, 2002RAC, 100S, 5919, 5919TH. Heat Alarms: HD6135F, HD6135FB   |
| Sensor            | Metal Oxide   |
| Indicator LED     | AC Power: Constant Red LED<br>DC Power: Intermittent Red LED<br>Local Alarm: Red LED flashes rapidly, audio alarm<br>Remote Alarm: Red LED out, audio alarm<br>Latching Alarm: Red LED flashes every 5 seconds after local alarm stops, audio off |
| Listing           | UL 2034   |

**SHIPPING SPECS:**

|                              |                            |
|------------------------------|----------------------------|
| Individual Carton Dimensions | 5.44"L x 2.00"W x 5.63"H   |
| Weight                       | .55 lbs.                   |
| Cube                         | 0.04 ft <sup>3</sup>       |
| UPC                          | 0 29054 856173             |
| Master Carton Dimensions     | 13.00"L X 5.93"W X 11.81"H |
| Master Pack                  | 12                         |
| Weight                       | 6.80 lbs.                  |
| Cube                         | .53 ft <sup>3</sup>        |
| UPC                          | 300 29054 85617 4          |

|                    |   |
|--------------------|---|
| Pallet Information |   |
| Cases per layer    | 25  |
| Number of layers   | 3   |
| Cases per pallet   | 75  |
| Cube               | 49.72 ft <sup>3</sup>   |
| Weight             | 566 lbs. (includes pallet)  |
| Manufactured By:   | BRK Brands, Inc.<br>3901 Liberty Street Road<br>Aurora, IL 60504-8122 |
| Distributed By:    |   |