

# SMOKE & CO COMBO ALARM

CAT. **SC6120B**



## SEPARATE SMOKE & CO INDICATION

Separate lights, markings and alarm sounds eliminate confusion.

## INTELLIGENT SENSING TECHNOLOGY™

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

## SMART 3-WIRE INTERCONNECT

Sends unique signals for  
Smoke and CO on one  
interconnect wire.

## LATCHING ALARM INDICATION

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

## 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. SC6120B is a wire-in, 120 VAC/DC, 60Hz with 9V battery backup single and/or multiple station combination smoke and carbon monoxide alarm specifically designed for residential and institutional applications including sleeping rooms of hospitals, hotels, motels, dormitories and other multi-family dwellings as defined in NFPA Code 101. Model SC6120B complies with UL217, UL2034, CSFM, HUD, FHA and other agencies that model their codes after the above agencies. It meets building codes where AC/DC smoke and carbon monoxide alarms are required either separately or in combination.

BRK Electronics® SC6120B combination smoke and CO alarm eliminates the need for two electrical boxes and features a permanently installed CO sensor and a dual ionization smoke sensor, separate visual and audible smoke & CO indication to eliminate confusion, Intelligent Sensing Technology™ for fewer nuisance alarms, smart 3-wire interconnect sends a unique signal for smoke and CO on one interconnect wire, 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. 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 junction box up to 4" size. 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 in place 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.

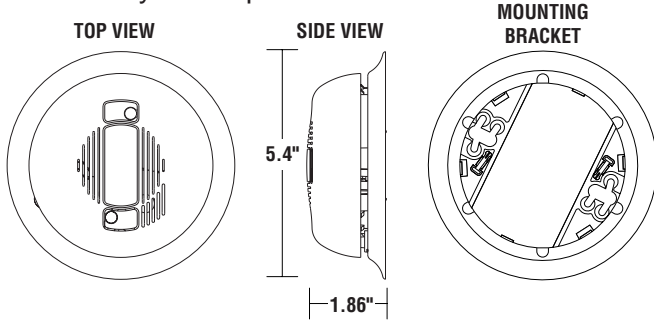


BSI Registered Firm—Certificate #FM21208

# CAT. SC6120B



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



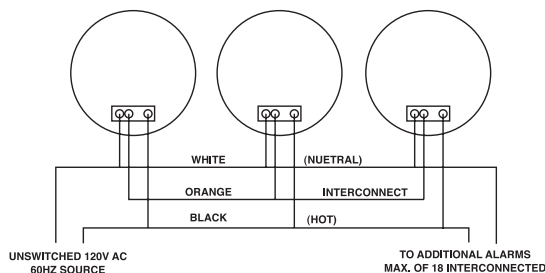
## ARCHITECTURAL AND ENGINEERING SPECIFICATION:

The combination smoke & carbon monoxide alarm shall be BRK Electronics® Model SC6120B and shall provide at a minimum the following features and functions:

1. A permanently installed carbon monoxide sensor and a dual ionization smoke sensor.
2. Powered by 120V AC, 60Hz with 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 of trouble.
3. A visual LED (green) power-on indicator to confirm unit is receiving AC power and a (green intermittent) indicator to confirm unit has switched to battery backup mode. A red LED to indicate when in smoke alarm and another red LED to indicate when in CO alarm.
4. The CO 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 alarm functions and to silence any unwanted alarms. In addition, the unit shall have a low battery silence feature to quiet the low battery chirp for up to eight hours, when AC power is on.
6. The unit shall perform self diagnostic tests every second and issue a malfunction warning (three rapid chirps) if a malfunction is detected.
7. A solid state piezo horn rated at 85dB at 10 ft. that provides a repeating horn pattern. Smoke Alarm: 3 beeps, pause, 3 beeps, pause; CO Alarm: 4 rapid beeps, pause, 4 rapid beeps, pause.
8. The unit shall be capable of operating between 40°F (4°C) and 100°F (38°C) and relative humidity between 10% and 90%.
9. The unit shall center mount to any standard electrical junction box up to 4" size without screw removal. Larger boxes may require an adapter plate.
10. The unit shall have an optional locking mechanism to deter theft of battery and/or theft of the unit.
11. The unit shall have a plug in connector and be capable of interconnection of up to 18 alarms, 12 smoke alarms maximum per NFPA 72.
12. The unit shall at a minimum meet the requirements of UL217 and UL2034, CSFM, NFPA 72, NFPA 101, ICBO, BOCA, SBCCI and CABO.

## INSTALLATION OF SMOKE/CO ALARM

Installation of this 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 catalog numbers listed in the "Technical Specs" section under "Interconnection" may be connected to these alarms.



# BRK ELECTRONICS®

## TECHNICAL SPECS:

Alarm Dimensions	5.40" dia x 1.86"H
Weight	7.6 oz
Operating Voltage	120V AC 60Hz pure sine wave 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 a smoke or carbon monoxide condition, causing the unit to alarm.
Alarm Reset	Automatic when Smoke and/or CO clears. Press test/silence button to reset manually.
Interconnections	18 total with SC6120B, 4120, 4120B, 4120SB, 4120AB, 4120SAB, 2002RAC, 100S, 5919, 5919TH, HD6135F, HD6135FB, CO5120BN, CO5120PDBN Maximum 12 smoke alarms
Smoke Sensor CO Sensor	Dual Ionization Metal Oxide
Indicator LED	AC Power: Constant Green LED DC Power: Intermittent Green LED Local Alarm: Red LED flashes rapidly, audio alarm Remote Alarm: Red LED out, audio alarm Latching Alarm: Red LED flashes every 5 seconds after local alarm stops, audio off
Listing	UL217 & UL 2034

## SHIPPING SPECS:

Individual Carton Dimensions	5.536"L x 2.096"W x 5.715"H
Weight	.63 lbs.
Cube	.038 ft³
UPC	0 29054 85642 5
Master Carton Dimensions	13.125"L X 5.813"W X 12.125"H
Master Pack	12
Weight	9.48 lbs.
Cube	.54 ft³
UPC	100 29054 85642 2
Pallet Information	
Cases per Layer	25
Number of Layers	3
Cases per Pallet	75
Cube	47.3 ft³
Weight	776 lbs.

Manufactured By:  
BRK Brands, Inc  
3901 Liberty Street Road  
Aurora, IL 60504-8122

Distributed By:

**BRK ELECTRONICS®**  
[www.brkelectronics.com](http://www.brkelectronics.com)

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