120 V AC Smoke Alarm

Part Number P1235CA Model i12020ACA
10-Year Limited Warranty

Ionization Technology

120 V AC Direct Wire
• **Interconnects with up to 24 devices**

Test / Hush® Button

Description

The Kidde i12020CA is a 120 V AC, wire-in smoke alarm that can function as a stand alone unit or interconnect with up to 24 Kidde devices (of which 18 can be initiating).

This smoke alarm uses ionization sensing technology Ionization sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smouldering fires) sooner than ionization alarms. Leading authorities recommend that both ionization and photoelectric smoke alarms be installed to help ensure maximum detection of the various types of fires that can occur within the home.

Features and Benefits

• **Ionization Technology** – May detect invisible fire particles (associated with flaming fires) sooner than photoelectric alarms.

• **120 V Interconnectable** – Will interconnect with up to 24 other devices (18 of which can be initiating), including smoke alarms (limit of 12), CO and heat alarms.

• **Multi-function One Button Design includes:**

  • **Hush® Feature** – Temporarily silences nuisance alarms for approximately 8 minutes (smoke must be present before Hush® is activated).

  • **Test Feature** – Simultaneously tests the unit's electronics and verifies alarm operation.

• **Tamper Resist Feature** – Tamper resist locking pin deters from tampering or theft.

Architectural and Engineering Specifications

The smoke alarm shall be Kidde model i12020ACA or approved equal. It shall be powered by a 120V AC, 60Hz source. The temperature operation range shall be between 4.4°C and 37.8°C (40° and 100°F) and the humidity operating range shall be 10%–95% relative humidity.

The unit shall incorporate an ionization sensor with nominal sensitivity of 0.5–0.9%/ft.

The smoke alarm can be installed on any standard single gang electrical box or a 4" octagon junction box. The electrical connection (to the alarm) shall be made with a plug-in connector. The unit shall provide optional tamper resistance that deters removal of the unit from the wall or ceiling.

A maximum of 24 Kidde devices can be interconnected in a multiple station arrangement. The interconnect system must not exceed the limit of 18 initiating devices, of which 12 can be smoke alarms. With 18 initiating devices (smoke, heat, CO, etc), interconnected, it is still possible to interconnect 6 strobe lights and or relay modules.

The alarm shall include a test button that will electronically simulate the presence of smoke and cause the unit to go into alarm. This sequence tests the unit's electronics and horn to ensure proper operation.

The unit shall include a piezoelectric horn that is rated at 85 decibels at 10 feet. The unit shall include a Hush® feature that silences the unit for approximately 8 minutes if a nuisance condition occurs.
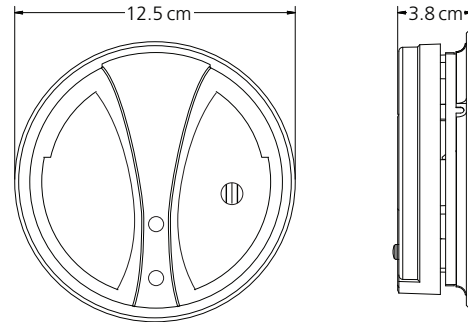
The unit shall incorporate red and green LED indicators. The green LED (when illuminated) indicates the presence of AC power. The red LED (located under the Test/Hush® button) has four modes of operation:

- **Standby Condition:** The red LED will flash every 40 seconds to indicate that the smoke alarm is operating properly.

- **Alarm Condition:** When the alarm senses products of combustion and goes into alarm, the red LED will flash one flash per second. The flashing LED and pulsating alarm will continue until the air is cleared. When units are interconnected, only the red LED of the alarm that senses the smoke or is being tested (the originating unit) will flash. All other units in the interconnected system will sound an alarm but their red LED's will NOT flash.

- **Alarm Memory:** This smoke alarm is equipped with an alarm memory, which provides a visual indication when an alarm has been activated. The red LED will illuminate for about 1.5 seconds every 20 seconds to indicate the memory condition.

- **Hush® Mode:** The red LED will illuminate for 1.5 seconds every 10 seconds, indicating the smoke alarm is in Hush® mode.

The unit shall at a minimum meet the requirements of CAN/ULC-S531. It also shall include a 10-year manufacturer's limited warranty.
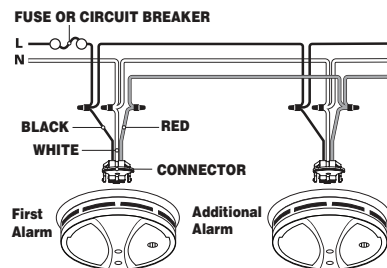
Technical Specifications

Power Source:	120V AC, 60Hz, 80mA max per alarm
Sensor:	Ionization
Audio Alarm:	85dB at 10ft
Temperature Range:	4.4°C (40°F) to 37.8°C (100°F)
Humidity Range:	10%-95% relative humidity, non-condensing
Unit Size:	12.7cm in diameter x 3.6cm depth
Unit Weight:	0.2kg
Wiring:	Quick connect plug with 6" pigtails
Interconnects:	Up to 24 Kidde devices (of which 18 can be initiating)
Warranty:	10-year limited

Installation of Alarm

The smoke alarm should be installed to comply with all local codes having jurisdiction in your area. Make certain all alarms are wired to a single, continuous (non-switched) power line, which is not protected by a ground fault interrupter. A maximum of 305m (1000') of wire can be used in the interconnect system. Use standard CSA listed household wire as required by code.

Ordering Information

UPC: 0-47871-40381-3

Part Number	I2 of 5	Pack Quantity	Case Dimensions (w x d x h centimeters)	Case Weight	Case/ Skid
P1235CA	**200-47871-40379-4**	**6 units**	**16.5cm x 27cm x 16cm**	**1.68kg**	**126**

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