Velociti® Series MCS-COF

Description

The Advanced Multi-Criteria Fire/CO Detector (MCS-COF) is an addressable device that provides both fire and carbon monoxide (CO) detection. For fire detection, the detector combines the following four separate sensing elements in one unit.

- Smoke
- Carbon Monoxide (CO)
- Light/flame
- Heat

These elements sense multiple components of a fire. This approach enables an enhanced sensitivity to real fire with a heightened immunity to nuisance particulate. For CO, the detector's electrochemical sensing cell creates a separate signal for life safety CO detection.

Released through the incomplete burning of various fuels, CO is a colorless, odorless and deadly gas that is virtually impossible to detect with the human senses. Because the potential exists for dangerous levels of CO to accumulate in almost any building, legislation mandates the use of CO detection in commercial spaces in the U.S. The MCS-COF is Listed to the UL® 2075 Standard for system-connected life safety carbon monoxide monitoring.

It is designed to be used with the Gamewell-FCI, E3 Series or S3 Series fire alarm control panel only. The MCS-COF should be used in conjunction with the B200S intelligent sounder base, which can generate either of the following patterns:

- Temp 3 pattern for fire.
- Temp 4 pattern for CO alarm indication.

The B200S recognizes the System Sensor synchronization protocol. This feature enables it to be used as a component of the general evacuation signal, along with other System Sensor horns, horn strobes, and chimes, when the MCS-COF is connected to a power supply or Fire Alarm Control Panel (FACP) output that is capable of generating the System Sensor synchronization pulses. With each sounder base carrying a unique address, the FACP can then command an individual sounder, or a group of sounders, to activate. The command set from the panel can be tailored to the specific event, allowing selection of volume, tone, and group. For more information on the B200S, refer to Data Sheet P/N: 9021-60671.

E3 Series® is a registered trademark of Honeywell International Inc.
UL® is a registered trademark of Underwriters Laboratories Inc.

Advanced Multi-Criteria
Fire/CO Detector



MCS-COF in a B200S Sounder Base

Features

- Offers the unique function to detect the following four major elements of a fire:
  - Smoke
  - Carbon Monoxide (CO)
  - Light/flame
  - Heat
- Supplies a separate CO detection signal.
- Presents the highest nuisance alarm immunity.
- Produces an automatic drift compensation of smoke sensor and CO cell.
- Uses only one address on the SLC.
- Includes the EasyTest CO testing capability.
- Complies with UL® Listed Standard 268 and UL® Listed Standard 2075.
- Separates the audible signal for fire or CO alarm when used with the B200S Base.
- Provides the CO cell end-of-life warning and fault.

SIGNALING
UL LISTED
S1195 7275-1703:0175

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

GAMEWELL-FCI
12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118

Specifications are for information only, are not intended for installation purposes, and are subject to change without notice. No responsibility is assumed by Gamewell-FCI for their use.
©2013 by Honeywell International Inc. All rights reserved.

Specifications

Physical Specifications

Base Diameter: 6.875" (17.46 cm) installed in a B200S base
Base Height: 3.46" (8.79 cm) installed in B200S base
Shipping Weight: 4.6 oz
Color: Ivory
Material: Bayblend FR110
Operating Temperature Range: 32° F to 100° F (0° C to 38° C)
Operating Humidity Range: 15 to 90% relative humidity (non-condensing)
Air Velocity: 0 to 4,000 ft/min (0 to 20 m/sec)

Electrical Specifications

Operating Voltage Range: 15 to 32 VDC
Maximum Standby Current: 300 µA at 24 VDC (no communication every 5 seconds with LED blink enabled).
Maximum Alarm Current (LED on): 7.2 mA at 24 VDC

Sensitivity Settings & Suggested Applications

Level 1: 1% per foot (30.48 cm) of smoke. Very clean environments: Used in Laboratories.
Level 2: 2% per foot (30.48 cm) of smoke. Clean environments: Used in offices.
Level 3: 3% per foot (30.48 cm) of smoke. Moderately clean environments: Used in hotel rooms, dorm rooms.
Level 4: 3% per foot (30.48 cm) of smoke with different algorithm processing and weighting of sensor elements. Used in hotel rooms near a shower, boiler rooms.
Level 5: 4% per foot (30.48 cm) of smoke. Used in equipment rooms, kitchens, paint shop.
Level 6: Thermal alarm at 135° F (57° C).

Warning: After the CO cell has reached the end-of-life, the CO sensor no longer provides life safety protection. However, when the fire detector enters Photo, Thermal, Infrared (PTIR) mode, the following sensitivities apply:

Level 1: 1% per foot (30.48 cm) of smoke. Very clean environments: Used in Laboratories.
Level 2: 2% per foot (30.48 cm) of smoke. Clean environments: Used in offices.
Level 5: 3% per foot (30.48 cm) of smoke. Moderately clean environments: Used in hotel rooms, dorm rooms.
Level 6: Thermal alarm at 135° F (57° C).

Specifications (Continued)

CO Monitoring UL Standard Reference - Alarm Thresholds are as follows:

Parts per Million	70 ± 5ppm	150±5ppm	400± 10ppm
Detector Response Time, min.	60-240	10-50	4-15

Note: Per UL Standard 2075, the MCS-COF has been tested to the sensitivity limits defined in UL Standard 2034.

Ordering Information

Part Number	Description
MCS-COF	Advanced Multi-Criteria Fire/CO Detector **Note:** Due to the unique nature of this detector, please consult your Fire Alarm Control Panel Manufacturer for the specific model and compatibility.
Accessories:	
B200S	Addressable Sounder Base
M02-04-01	Detector Test Magnet
M02-09-01	Telescoping Test Magnet