FIRE CONTROL INSTRUMENTS
by Honeywell

MCS-ACCLIMATE2

www.firecontrolinstruments.com

MULTI-CRITERIA ANALOG, ADDRESSABLE SENSOR

GENERAL

The FCI MCS-ACCLIMATE2 sensor is an intelligent, addressable, multi-sensing, low- profile sensor designed for use with the 7200, FV7200, 7100, 7100 NetSOLO, and NetSOLO BroadBand Series fire alarm control panels.

The MCS-ACCLIMATE2 sensor uses a combination of photoelectric and thermal sensing technologies that are designed to increase immunity to false alarms. Unlike traditional intelligent devices, the MCS-ACCLIMATE2 sensor has a microprocessor in the sensor head that processes alarm data. As a result, the MCS-ACCLIMATE2 sensor adjusts its sensitivity automatically, without needing operator intervention.

Areas where the MCS-ACCLIMATE2 sensor is especially useful include office complexes, schools, college campuses, manufacturing and industrial facilities, and anywhere else the use of a particular area may change. One day a conference room, tomorrow a kitchen, the next day a copy machine room — the MCS-ACCLIMATE2 sensor automatically adjusts its sensitivity to the environment!

INSTALLATION

MCS-ACCLIMATE2 plug-in sensors use a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug in and remove sensors without using a ladder.

Mount base on a box which is at least 1.5" (3.81 cm) deep. Suitable mounting base boxes include:

- 4.0" (10.16 cm) square box.
- 3.5" (8.89 cm) or 4.0" (10.16 cm) octagonal box.
- Single-gang box *(**except** relay or isolator base)*.
- ***With B501BH base,*** use a 4.0" (10.16 cm) square box.
- ***With B224RB or B224BI base,*** use a 3.5" (8.89 cm) octagonal box, or a 4.0" (10.16 cm) octagonal or square box.

NOTE: *Because of the inherent supervision provided by the SLC,* ***end-of-line resistors*** *are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.*

FEATURES

- ***Automatically adjusts sensitivity levels without the need for operator intervention or programming. Sensitivity increases with heat.***
- ***Microprocessor-based, combination photo and thermal technology.***
- ***Sleek, low-profile design.***
- ***Rotary, decimal addressing (01 – 99)***
- ***Addresses can be viewed and changed without the need for electronic programmers.***
- ***Dual LED design provides 360° viewing angle.***
- ***LEDs lock RED when in Alarm.***
- ***Several base options, including relay, isolator, and sounder.***
- ***Built-in functional test switch activated by external magnet.***
- ***Listed to UL 268.***
- ***Capable of heat-only alarm mode, enabled by a special command from the panel. Smoke alarms are ignored.***
- ***Backwards-compatible on most panels.***
- ***Low-temperature signal at 45°F/ 7.22°C (+/– 10°F/5.54°C).***

DETECTOR SPACING:

FCI recommends spacing detectors in compliance with NFPA 72. In low airflow applications with smooth ceilings, space detectors 30 feet (9.144 m). For specific information regarding detector spacing, placement, and special applications, refer to NFPA 72. *System Smoke Detector Application Guide,* document A05-1003, is available at www.systemsensor.com.

APPLICATION NOTE:

The MCS-ACCLIMATE2 sensor has the unique ability to adjust sensitivity according to the environment, based on heat and smoke levels. Avoid installing these sensors in locations that are susceptible to rapid and high temperature changes. An example of an incorrect application would be near or in line with the output of a self-contained heater.

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UL LISTED

FM APPROVED

MEA Approved

An ISO 9001 Company

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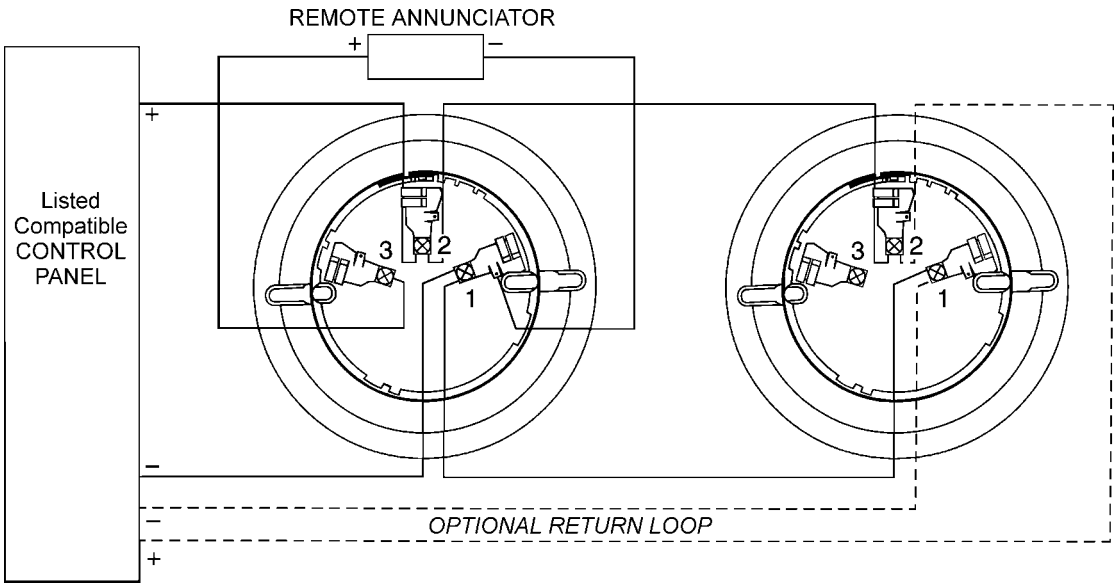

SPECIFICATIONS

Size: 2.1" (5.1 cm) high x 4.1" (10.4 cm) diameter installed in B501 base,
6.1" (15.5 cm) diameter installed in ADB-FL base.
Shipping weight: 5.2 oz. (147 g).
Operating temperature: 0°C to 38°C (32°F to 100°F).
UL-Listed velocity range: 0 – 4000 ft./min. (1219.2 m/min.), suitable for installation in ducts.
Relative humidity: 10% – 93% noncondensing.
Thermal ratings: fixed-temperature setpoint 135°F (57°C).
Sensitivity: ***auto-adjusting levels:*** 1 to 2%/ft. and 2 to 4%/ft.
fixed-sensitivity levels: 1, 2, and 4%/ft.

ELECTRICAL SPECIFICATIONS

Voltage range: 15 – 32 volts DC peak.
Standby current (max. avg.): 250 µA @ 24 VDC (without communication); 360 µA @ 24 VDC (one communication every 5 seconds with LED enabled).
Circuit resistance: 40 ohms maximum; varies according to control panel used. Refer to panel installation manuals.
LED current (max.): 6.5 mA @ 24 VDC (“ON”).

BASES AVAILABLE

B210LP: 6.1" (15.5 cm) diameter.
B501: 4.1" (10.4 cm) diameter.
B501BH or B501BHT: Sounder base assembly (B501BHT produces Temporal Pattern). Includes B501 base.
B224RB Relay Base: ***Screw terminals:*** up to 14 AWG (2.0 mm²). ***Relay type:*** Form-C. ***Rating:*** 2.0 A @ 30 VDC resistive; 0.3 A @ 110 VDC inductive; 1.0 A @ 30 VDC inductive. ***Dimensions:*** 6.2" (15.748 cm) x 1.2" (3.048 cm).
B524BI Isolator Base: ***Dimensions:*** 6.2" (15.748 cm) x 1.2" (3.048 cm). ***Maximum:*** 25 devices between isolator bases.

FIRE CONTROL INSTRUMENTS
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