

Velociti[®] Series

MCS-ACCLIMATE2F

Description

The Gamewell-FCI Velociti[®] Series, MCS-ACCLIMATE2F sensor is an analog, addressable, multi-sensing, low-profile sensor designed for use with Gamewell-FCI analog addressable fire alarm control panels.

The MCS-ACCLIMATE2F sensor uses a combination of photoelectronic and thermal sensing technologies that are designed to increase immunity to false alarms. Unlike traditional addressable devices, the MCS-ACCLIMATE2F sensor has a microprocessor in the sensor head that processes alarm data. As a result, the MCS-ACCLIMATE2F sensor automatically adjusts its sensitivity, without requiring operator intervention.

Areas where the MCS-ACCLIMATE2F sensor is especially useful include office complexes, schools, college campuses, manufacturing and industrial facilities, and anywhere else where 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-ACCLIMATE2F sensor automatically adjusts its sensitivity to the environment!

The Velociti[®] Series uses a communication protocol that substantially increases the speed of communication between the sensors and Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group has a status change, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

Multi-Criteria Analog, Addressable Sensor



MCS-ACCLIMATE2F

Features

- Sleek, low-profile design
- Visual rotary, decimal switch addressing (01-159)
- Built-in functional test switch activated by an external magnet
- Bicolor LEDs flash green whenever the sensor is addressed, and light steady red on alarm*
- Automatically adjusts sensitivity levels without the need for operator intervention or programming sensitivity increases with heat
- Microprocessor-based, combination photo and thermal technology
- Capable of heat-only alarm mode, enabled by a special command from the E3 Series[®] panel, and smoke alarms are then ignored
- Low-temperature signal at 45°F (7.2°C) +/- 10°F (5.5°C)
- Compatible with the Gamewell-FCI analog addressable panels
- Suitable for installation in ducts
- Relay, isolator and sounder base options available

*Only the red LED is operative in panels that do not operate in Velociti[®] mode.

An ISO 9000-2000 Company

SIGNALING



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APPROVED 3023594

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GAMEWELL-FCI

12 Clintonville Road, Northford, CT 06472-1653 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.

Installation

MCS-ACCLIMATE2F 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 the base on a box which is at least 1.5" (3.8 cm) deep. Suitable mounting base boxes include:

- 4.0" (10.2 cm) square box.
- 3.5" (8.9 cm) or 4.0" (10.2 cm) octagonal box.
- Single-gang box (except relay or isolator base).
- With the B200SR base, mounted on a 4.0" (10.2 cm) square box.
- With the B224RB or B224BI base, mounted on a 3.5" (8.9 cm) octagonal box, or a 4.0" (10.2 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.

Sensor Spacing

Gamewell-FCI recommends spacing sensors in compliance with NFPA 72. In low airflow applications with smooth ceilings, space sensors 30 feet (9.1 m). For specific information regarding sensor spacing, placement and special applications, refer to NFPA 72.

Application Note

The MCS-ACCLIMATE2F 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 high or rapidly fluctuating temperatures. An example of an incorrect application would be near or in line with the output of a heating unit.

Specifications

Size:	1.7" (45 mm) High x 6.1 (155 mm) diameter installed in ADB-FL base
Diameter:	6.2" (155 mm) installed in ADB-FL base 4.1" (104 mm) installed in B501 base 6.875" (17.46 cm) installed in B200SR base
Shipping weight:	5.0 oz. (142 g)
Operating Temperature Range:	32° F to 100° F (0° to 38° C)
UL[®]-Listed Velocity:	0-4,000 ft./min. (1219.2 m/min.), suitable for installation in ducts
Relative Humidity:	10-93% (non-condensing)
Thermal Ratings:	Fixed-temperature setpoint 135° F (57° C)

Electrical Specifications

Voltage Range:	15 – 32 volts DC
Standby Current:	.0003A @ 24 VDC (One communication every 5 seconds with LED enabled)
Maximum Alarm Current:	.0065A @ 24 VDC (LED lit)

Bases and Options

ADB-FLF	4.0" (10.2 cm) diameter standard base
B200SR	6.875" (17.46 cm) diameter base Standard sounder base, UL 864 9th Edition compliant, ULC Listed
B224RB	Relay Base Up to 14 AWG (2.0 mm ²) Relay type: Form-C Rating: 2.0A @ 30 VDC resistive; 0.3 A @ 110 VDC inductive; 1.0 A @ 30 VDC inductive.
B224RB	Relay Base
Dimensions:	6.2" x 1.2" (15.7 x 3.0 cm)
B224BI	Isolator Base Maximum: 25 devices between isolator bases.
Dimensions:	6.2" x 1.2" (15.7 x 3.0 cm)
RA-400Z	Remote alarm indicator, LED
BCK-200	Black detector covers (box of 10)

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