Gamewell
FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Description

The Gamewell-FCI Analog Addressable Multi-Sensor (XP95-M) is designed to provide the highest effectiveness by utilizing the latest microprocessor technology and enhanced algorithms. The XP95-M Multi-Sensor includes both Photoelectric and Thermal sensing elements integrated into a single device. The XP95-M is capable of digitally transmitting not only its address to the FACP, but also combined data consisting of an analog value from both the photoelectric chamber and the thermal element for analysis.

The XP95-M Multi-Sensor is designed for operation with Gamewell-FCI's 600 Series of Analog Addressable control panels. All of the sensors in the XP95 range have the same external dimensions and fit all available base options with minimal insertion force. Polling and external alarm status is indicated by means of dual light-emitting diodes (LEDs) located on either side of the housing for easy visibility. The thermal element in the XP95-M is designed with open webs in the housing to allow the free movement of air around the exposed thermistor. The photoelectric detection element utilizes a patented smoke chamber and infrared smoke sensing design.

Operation

The XP95-M Multi-sensor contains both a photoelectric detection chamber as well as a thermal sensing element. The photoelectric sensor utilizes a patented smoke chamber and infrared smoke sensing design.

The Infrared LED emits a burst of collimated light every second, or emits light in response to a direct interrogation. In clean air, the photo diode receives no light from the emitter becaues of the arrangement of the chamber. When smoke enters the chamber, it scatters light from the emitter onto the photo diode receptor proportionally to the smoke characteristics and density. As the smoke content in the chamber increases, the signal from the photo diode receptor increases

Analog Addressable Multi-Sensor

CS-2052ph1.wmf

XP95-M

Features

- Compatible with the Gamewell-FCI intelligent analog addressable 600 series control panels
- Combines photoelectric smoke and thermal sensor values for enhanced detection performance and false alarm reduction
- Detector head utilizes common analog addressable style bases
- Address is set by XPert addressing card and is stored in the sensor base
- Analog count transmission to FACP
- Rate of rise heat signals
- Drift compensation via internal processing algorithms

An ISO 9000-2000 Company

SIGNALING

(UL)
LISTED

Operation (Continued)

The XP95-M monitors temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature. The thermistor is calibrated to return a normal air temperature analog value at 25º C. Information from each sensing element is processed and conditioned by an on-board advanced technology ASIC and is digitally transmitted to the FACP as a single analog value comprised of the combined responses from both the optical and thermal detection elements. The XP95-M is an intelligent device. Alarm and trouble conditions are determined by the microprocessor in the head, which also automatically performs drift compensation.

If the sensor reports a condition that matches its programmed trouble signature, the FACP will report that the sensor is in trouble and will follow its programmed response sequence. Likewise, if the status reported matches the alarm signature, the Gamewell-FCI FACP will follow the programmed alarm response for the specific device in alarm. When a sensor is in alarm, the integral LED in the sensor's housing will light steady.

The XP95 Multi-Sensor is designed to be connected to a two-wire SLC circuit carrying both data and a 17V to 28V DC supply voltage, and it is insensitive to loop connection polarity. A remote LED indicator may be connected. The XP95-M is considered the optimum sensor for most general applications since it responds to both smoldering and flaming fires.

Engineer's Specifications

The contractor shall furnish and install, where indicated on the plans, a combination photo/heat multi-sensor detector (Gamewell-FCI model XP95-M) with one of the several Addressable Mounting Base Options available. The combination sensor head and twist lock mounting base shall be UL Listed and UL Listed as compatible with the Gamewell-FCI fire alarm control panels. The base shall permit free interchange of sensor heads without requiring any additional wiring or additional programming of the head or base. The smoke sensor shall contain an integral LED that shall latch in when the unit goes into alarm.

Specifications

Quiescent Current	500 mA average
Alarm LED Current	.004A
Remote Alarm Output:	.004A @ 5 VDC
Temperature Range:	-5°F - 140°F
Relative Humidity (Non-Condensing):	0% to 95%

Ordering Information

Model	Description
XP95-M	Multi-Sensor (Analog Addressable (55000-886)
XP95-B6EZ	6" (15.24 cm) Ultra Low Profile EZ-Fit Mounting Base with X-Pert Card (45681-250)
XP95-B4	4" (10.16 cm) Mounting Base with X-Pert Addressing Card (45681-210)
XP95-B6R4	6" (15.24 cm) Relay Base (4 Wire) with X-Pert Addressing Card
XP95-B6SNDR	6" (15.24 cm) Mounting Base with X-Pert Addressing Card and Audible Alarm Sounder
71112	Additional Blank X-Pert Addressing Cards
30203	Remote LED (24V)