Gamewell FCI FIRE CONTROL INSTRUMENTS

by Honeywell

Analog Addressable Duct Smoke Detectors

Description

The Gamewell-FCI analog addressable duct smoke detectors provide early detection of smoke and products with combustion present in air moving through an HVAC duct. Fans, blowers and complete systems may be shut down or activated in fire alarm mode by the Fire Alarm Control Panel (FACP) in the event of smoke detection.

The Gamewell-FCI analog addressable duct smoke detectors may utilize either interchangeable photoelectric or ionization sensor heads. The external alarm indication is a light-emitting diode (LED), easily visible through the housing. A manual reset switch is provided on the front of the sensor.

Duct smoke detectors are also available with auxiliary relay contacts. The relay requires two additional wires for power and will activate when the sensor reaches alarm levels. All wiring must comply with local codes and regulations.

XP95 Duct Smoke Detectors digitally transmit their address and the chamber's analog value to the FACP for analysis.

Air sampling is accomplished by two tubes which protrude into the duct. An exhaust tube of one standard length 7.5" (19.05 cm) is provided with the sensor housing. Intake sampling tubes, which must be ordered separately, are supplied in three standard lengths: 2.5, 5, or 10 feet (0.762, 1.524, or 3.048 m).

Installation
Duct mounting is accomplished by the use of a template and four sheet metal screws, provided. The duct detectors are compatible with the analog loops on Gamewell-FCI's 600 Series Analog Addressable Control Panels.

Programming
The only programming required for the XP95 Duct Smoke Sensors is address setting. This is accomplished through the use of the XPert addressing card which is inserted into the sensor base.
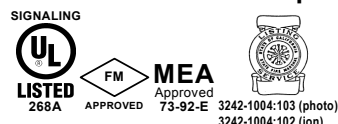

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XP95 Series

Features

- Compatible with the Gamewell-FCI 600 Series analog addressable control panels
- Interchangeable "Plug-in" photoelectric or ionization heads
- Address is stored in the sensor base
- Address is set by XPert addressing card
- Remote alarm LED option
- Two-wire supply- polarity insensitive
- Very low standby current
- LED alarm indication on sensor head
- Rugged steel backbox with clear plastic cover
- Large terminal connection screws
- No additional screens or filters to clean or replace
- Relay version available with optional remote test unit
- Three standard tube lengths available: 2.5, 5, or 10 ft. (0.762, 1.524, or 3.048 m)

An ISO 9000-2000 Company

SIGNALING
UL LISTED 268A
FM APPROVED
MEA Approved 73-92-E
3242-1004:103 (photo)
3242-1004:102 (ion)

Programming (Continued)

When the sensor head is inserted into the base, the address is automatically relayed to the sensor. Changing the sensor does not require additional programming since the address remains on the XPert card located in the base. All other sensor-specific programming is accomplished at the FACP.

Engineer's Specifications

The contractor shall furnish and install, where indicated on the plans, analog addressable air duct smoke detectors. The sensors shall be listed by Underwriter's Laboratories per UL 268A and UL-Listed as compatible with the Fire Alarm Control Panel (FACP). The sensors shall operate at air velocities from 300 to 4,000 feet (91.44 to 1219.20 m) per minute. The smoke sensor shall contain an integral LED that shall latch in when the unit goes into alarm, mounted at a 30° slant to provide a wide viewing angle.

A manual reset/test switch shall be located on the front of the device. The housing shall contain a sensor base which will accept photoelectric or ionization heads. All wiring must comply with local codes and regulations. The duct sensor housing shall have a metal chassis with a clear plastic cover and complete mechanical installation may be performed without removal of the cover. The duct smoke detector shall be the Gamewell-FCI model, XP95-ID(R) or XP95-PD(R) analog addressable duct smoke detector.

Specifications

Ambient Temperature:	32° F to 120°F (0°C to 49°C)
Humidity:	10% to 85% R.H
Material:	18 gauge steel backbox, clear plastic cover
Dimensions:	10.0" H x 8.25" W x 2.25" D (25.4 H x 21.0 W x 5.7 D cm)
Maximum Net Weight:	4.0 lbs. (1.814 kg)
Mounting:	Template and necessary hardware supplied
Radioactive Element:	For Ionization versions only: Americium 241 (0.9 microcuries)
Sensitivity:	Factory set (ion); or adjustable via the IF600 control panel (photoelectric)
Air Velocity:	300 to 4,000 feet per minute.
Pressure Differential:	0.01 to 1.2 inches (1.524 to 20.320 meters per second) of water
Standby Current:	Photoelectric: 340 µA Ionization: 280 µA
Alarm LED Current:	Photoelectric: 4 mA Ionization: 2 mA
Remote Alarm Output Range:	20 mA maximum; diode gated

Specifications (Continued)

Relay Versions Only:

Relay Contacts:	Two dry Form-C contacts
Relay Contact Ratings:	10 A @ 24 VDC resistive maximum
Operating Voltage:	24 VDC
Current:	**Standby current:** 0.010 A @ 24 VDC **Alarm current:** 0.055 A @ 24 VDC

Ordering Information

Model	Description
XP95-ID	Two-wire air duct, ionization smoke detector 24 VDC (RW-AAN)
XP95-PD	Two-wire air duct, photoelectric smoke detector 24 VDC (RW-AAP)
30203-01	Remote LED alarm indicator (two VDCs); used with XP95-PD and XP95-ID
XP95-IDR	Four-wire air duct, ionization smoke detector 24 VDC with relay (RW-ARN)
XP95-PDR	Four-wire air duct, photoelectric smoke detector 24 VDC with relay (RW-ARP)
30203	Remote LED alarm indicator (24 VDCs); used with relay versions
30007-02	Remote test station with alarm LED; used with relay versions
70896-02	Sampling tube, 2.5 feet (0.762 m)
70896-05	Sampling tube, 5 feet (1.524 m)
70896-10	Sampling tube, 10 feet (3.048 m)
XP95-I	Ionization sensor head (replacement)
XP95-P	Photoelectric sensor head (replacement)
72247	Duct detector enclosure (WP-1) (See Data Sheet CS-2308).