Fike® Protection Systems

ANALOG HEAT SENSOR

CATALOG NUMBER 1101

INTELLA-SCAN II®

Fire Detection, Suppression and Monitoring System
Engineer and Architect Specifications

60-033

DESCRIPTION

The 60-033 Analog Heat sensor is an addressable device that monitors the ambient temperature of the room. The sensor transmits a true analog signal to the Intella-Scan II. This analog signal is proportional to the temperature measured by the sensor. The Intella-Scan II converts the analog information into an actual temperature reading. This temperature is compared to the alarm threshold set by the custom configuration. If the value exceeds the threshold, the alarm is annuciated and action is taken.

The Analog Heat sensor utilizes a microprocessor to actively communicate with the Intella-Scan control panel. The microprocessor enables the sensor to measure the temperate and ensures proper communication with the Intella-Scan II. Each Sensor is set to a unique address between 1 and 127 using binary sequence switches. The sensor is connected to the Intella-Scan II by a single pair of wires which provide both power and communication.

The sensor and base tend to blend in with the ceiling and are unobtrusive in almost any decor. The Sensor is detachable from the base, which allows for easy maintenance.

Operation

The Heat Sensor operates in conjunction with the Intella-Scan II control panel. Each sensor can be connected to any available communication loops. The Sensor/Base combination may be wired in either a continuous loop that allows redundant communication paths (NFPA Style 6) or in an open-ended loop (NFPA Style 4).

Since each sensor is addressable, communication wiring may be “T” tapped and still provide Style 4 supervision.

The Intella-Scan II panel, through the Analog Communication Module, routinely interrogates each Sensor. Each time the Sensor is interrogated by the panel, a heat level measurement is made and the LED on the Sensor base flashes.

The Analog Communications module communicates with each sensor using current pulse techniques. The sensor varies the current required during several stages of the communication. The data is verified over several polling sequences to prevent false alarms. The current reading provides an analog value which the Analog Communication modules convert to a temperature measurement. The sensor also reports other information which allows the Intella-Scan II to monitor the integrity of the addressable loop.

Engineers Specification

The Heat Sensors shall be Fike part number 60-033. All Heat Sensors shall provide an analog measurement, indicating the current ambient temperature. Alarm thresholds 101°F to 158°F shall be determined at the control panel.

Each Sensor shall be detachable from a twist lock base. An LED shall be integral to each base and shall momentarily illuminate on interrogation by the control panel. In order to facilitate location of a specific sensor, an operator must be able to manually illuminate the base LED from the control panel. The Sensor shall operate at up to 85% relative humidity. Each sensor shall be individually identified at the Intella-Scan II by a 32 character custom message.

Fike® Protection Systems
Division Fike Corporation
704 South 10th Street • P.O. Box 610 • Blue Springs, Missouri 64013-0610 U.S.A. • (816) 229-3405 • Telefax (816) 229-4615

August, 1994
Revised Issue

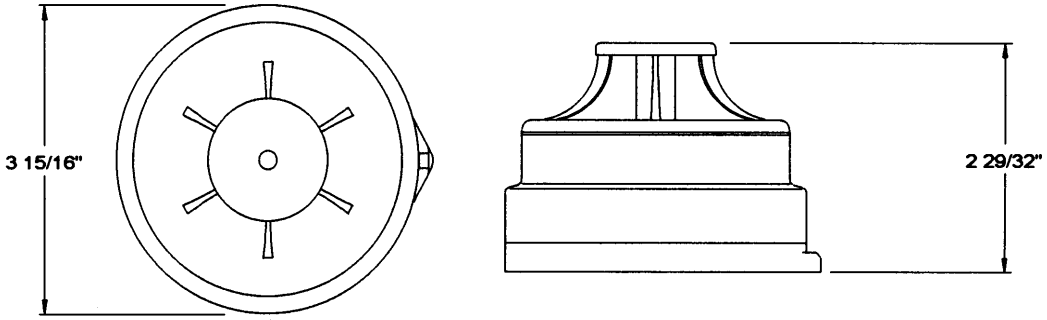
Specifications

Type of Detector	Analog Heat Voltage
Minimum	17.0 - 27.0 VDC
Maximum	41 VDC
Current	< 1 mA
Temperature range	0°F - 158°F
Humidity	85 percent
Communication	Proprietary Current Pulse
Address Setting	7 Bit Dip Switch
Address Range	1 - 127 (Binary)
Mounting	3” Octagonal Box
Weight	.25 LB

Ordering Information

60-033	Analog Heat Sensor / Base
60-1024	Analog Heat Sensor
63-1011	Base, Analog

Dimensional Drawing



Wiring Diagram