# **CONVENTIONAL DETECTORS**





55000-326IMC



55000-139 / 55000-145IMC



Our Context Plus Series 65A range of conventional fire detectors incorporates wellproven sensing technologie including an IC based on that used in our Context Plus XP95 analogue addressable detectors. The range consists of ionization, integrating ionization and photo-electric smoke detectors, two grades of thermal detector and a standard base. Each type of detector has an LED which flashes continuously in stand-by mode.

The range is tested and approved to the following standards: UL268-smoke detectors (file S24127) and UL521-thermal detectors (file S24128).

### Context Plus Ionization Smoke Detector, 55000-226IMC

The sensing part of the detector consists of two chambers - an open outer chamber and a semi-sealed reference chamber within. Mounted in the reference chamber is a low activity radioactive foil of Americium 241 which enables current to flow between the inner and outer chambers when the detector is powered up. As smoke enters the detector, it causes a reduction of the current flow in the outer chamber and hence an increase in voltage measured at the junction between the two chambers. The voltage increase is monitored by the electronic circuitry which triggers the detector into the alarm state at a preset threshold. An externally visible red LED lights up when in alarm. IP rating = IP23D

Features: Flashing LED; Alarm indication: Red LED; Supply voltage: 9 to 33V Average stand-by current at 24V: 45uA; Average stand-by current at 9V: 21uA Alarm current at 24V: 52mA; Alarm current at 9V: 17mA

Ambient temperature: 32 to 158°F; Max wind continuous: 2,000ft/min Remote output (R-) characteristics: Current sink to -ve line, limited to 17mA. Note: when using a remote indicator a current-limiting series resistor may be required.

#### Context Plus Photo-electric Smoke Detector, 55000-326IMC

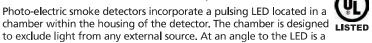






photo-diode which normally does not register the column of light emitted by the LED. In the event of smoke from a fire entering the chamber, the light pulse from the LED will be scattered and hence registered by the photo-diode. If the photo-diode "sees" smoke on the two following pulses, the detector changes into the alarm state and the indicator LED lights up. IP rating = IP23D

Features: Flashing LED; Alarm indication: Clear LED, Red in alarm; Supply voltage: 9 to 33V Average stand-by current at 24V: 45uA; Average stand-by current at 9V: 40uA Alarm current at 24V: 52mA; Alarm current at 9V: 17mA

Ambient temperature: 32 to 100°F; Max wind continuous: not affected Remote output (R-) characteristics: Current sink to -ve line, limited to 17mA. Note: when using a remote indicator a current-limiting series resistor may be required.

## Context Plus Thermal Detector, Ordinary, 55000-139IMC Context Plus Thermal Detector, Intermediate, 55000-145IMC





Thermal detectors operate by using a matched pair of thermistors to sense heat. One thermistor is exposed to the ambient temperature,

the other is sealed. In normal conditions the two thermistors register similar temperatures, but, on the development of a fire, the temperature recorded by the exposed thermistor will increase rapidly, resulting in an imbalance, causing the detector to change into the alarm state. Rate-of-rise detectors are designed to detect a fire as the temperature increases, but they also have a fixed upper limit at which the detector will go into alarm if the rate of temperature increase has been too slow to trigger the detector earlier. Externally, the thermal detectors have wide openings to the surrounding atmosphere to allow good movement of air around the external thermistor. IP rating = IP23D

Features: Flashing LED; Alarm indication: Red LED; Supply voltage: 9 to 33V 9 to 33V Average stand-by current at 24V: 55uA; Average stand-by current at 9V: 50uA Alarm current at 24V: 52mA; Alarm current at 9V: 17mA Ambient temperature: 32 to 100°F; Max wind continuous: not affected Remote output (R-): Current sink to -ve line, limited to 17mA. Note: when using a remote indicator a current-limiting series resistor may be required. Alarm upper limit: 135°F for 55000-139IMC; 200°F for 55000-145IMC

#### Context Plus Base, 45681-200IMC

Designed to enable detectors to be plugged in without any need for force - particularly useful when fitting to suspended ceilings. As well as being lockable it contains no electronic parts which could be damaged during installation.





Supply voltage: 9 to 33V; Normal operating temp (no condensation or icing): 32 to 100°F





