Context Plus XP95 Analogue Addressable Smoke Detector Product code: 55000-685IMC



OPTICAL SMOKE DETECTOR, XPERT STYLE, 55000-685IMC



The Context Plus Addressable Optical Smoke Detector. Within the case is a printed circuit board which, on one side, has the light proof labyrinth chamber with integral gauze surrounding the optical measuring system and, on the other, the address

capture, signal processing and communications electronics.

An infrared light emitting diode within its collimator is arranged at an obtuse angle to the photo-diode. The photo-diode has an integral daylight-blocking filter.

The IR LED emits a burst of collimated light every second. In clear air the photo-diode

receives no light directly from the IR LED because of the angular arrangement and the

dual mask. When smoke enters the chamber it scatters photons from the emitter IR LED onto the photo-diode in an amount related to the smoke characteristics and density.

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Specifications are typical and given at 23°C and 50% relative humidity unless stated.

Communication protocol:

XP95 pulse 5-9V

Detector Type: Products of combustion (smoke) detector

Detection Principles: Photo-electric detection of light scattered in a forward direction by smoke particles **Chamber Configuration:** Horizontal optical bench housing an infrared emitter and sensor arranged radially

to detect scattered light

Sensor: Silicon PIN photo-diode **Emitter:** GaAs Infra-red light

emitting diode

Sampling Frequency: 1 second Supply Wiring: Two wire supply,

polarity insensitive **Terminal Functions:**L1&L2 supply in and out connections (polarity

insensitive)

+R remote indicator positive connection (internal $2.2k\Omega$ resistance to supply +ve)

-R remote indicator negative connection (internal $2.2k\Omega$ resistance to supply - ve)

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Supply Voltage: 17 to 28 Volts dc

Quiescent Current: 340µA
Power-up Surge Current: 1mA
Duration of Power-up Surge

Current: 1 seconds

Maximum Power-up Time:
4 seconds for communications
(measured from application of
power and protocol) 10 seconds
to exceed 10 counts 35 seconds

for stable clean air value

Storage Temp: -30°C to +80°C

Operating Temp: -20°C to +60°C

Alarm Level Analogue Value: 55

Clean Air Analogue Value: 25±7

counts

Alarm Indicator: Clear lens Light

Emitting Diode (LED)

Alarm LED Current: 4mA

Remote LED Current: 5mA

maximum

Type Code: (210 43) 101 00

Sensitivity: Nominal threshold of

2.1% light grey smoke obscuration per metre

Guaranteed Temperature Range (No condensation or icing): -20°C

to +60°C

Humidity (No condensation or icing): 0% to 95% relative humidity

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Wind Speed: Unaffected by wind Atmospheric Pressure: Unaffected Vibration, Impact & Shock: To EN54

Pt 7 (BS5445 Pt 7)

IP Rating: 33

Dimensions: (diameter x height)

Detector: 100mm x 39mm

Detector in Base: 100mm x 47mm

Weights: Detector: 105g Detector

in Base: 161g

Materials: Detector Housing: White polycarbonate V-0 rated to UL 94 Terminals: Stainless Steel

DEVICE RESPONSE

Type: Overheating/thermal combustion

Response: Very good

Type: Smouldering/glowing combustion

Response: Good

Type: Flaming combustion

Response: Good

Type: Flaming with high heat output

Response: Good

Type: Flaming - clean burning

Response: Very poor