Part Number 55000-400IMC
Standard Temperature Detector

Part Number 55000-401IMC
High Temperature Detector

DEVICE RESPONSE

Type: Flaming with high heat output
Response: Moderate/good

Type: Flaming - clean burning
Response: Moderate/good

Type: Flaming combustion
Response: Poor

Type: Overheating/thermal combustion
Response: Very poor

Type: Smouldering/glowing combustion
Response: Very poor

Context Plus XP95 temperature (heat) detectors have a common profile with ionisation and optical smoke detectors but have a low air flow resistance case made of self-extinguishing white polycarbonate. They monitor temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature.

The response to temperature increases of the standard temperature detector (part no: 55000-400IMC) enables the detector to be utilised as an EN54 Grade 2 heat detector.

To provide a device for use in ambient temperatures of up to 50°C, a high temperature detector (part no: 55000-401IMC) is also available. This has similar characteristics to the standard temperature detector at 25°C but reaches a 55 count (alarm) at 90°C.

Technical Data

Standard temperature detector
Detector Part No 55000-400 IMC

Base Part No 45681-210

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

Detector Type: Fixed Temperature Heat Detector (software algorithm may be used for Grade 1 response)

Detector Principle: Linear approximation over temperature range 25°C to 90°C

Sensor: Single NTC Thermistor

Sampling Frequency: Continuous

Supply Wiring: Two wire supply, polarity insensitive

Terminal Functions:

L1&L2	supply in and out connections (polarity insensitive)
+R	remote indicator positive connection (internal 2.2kΩ)
	resistance to supply +ve)
-R	remote indicator negative connection (internal 2.2kΩ resistance to supply - ve)

Supply Voltage: 17 to 28 Volts dc

Modulation Voltage at Detector: 5 to 9 Volts peak to peak

Quiescent Current: 250µA average, 500µA peak

Power-up Surge Current: 1mA

Duration of Power-up Surge Current: 0.3 seconds

Maximum Power-up Time: 4 secs

Storage Temp: -30°C to +80°C

Operating Temp: -20°C to +70°C

Analogue Value at 25°C 25± 5 counts

Alarm Level 55 Counts: 55°C

Alarm Indicator: Red light emitting diode (LED)

Alarm LED Current: 2mA

Remote LED Current: 4mA at 5V (measured across remote load)

Type Code: (210 43) 110 00

Sensitivity: 25°C to 90°C: 1°C/Count. -20°C returns 8 counts

***Guaranteed Temp. Range* (No condensation or icing):** -20°C to +70°C

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

Wind Speed: Unaffected in fixed temperature use

Atmospheric Pressure: Unaffected

Vibration, Impact & Shock: To EN54 Pt 5 1984 (BS5445 Pt 5 1984)

IP Rating: 53

Dimensions: (diameter x height)
Detector: 100mm x 42mm
Detector in Base: 100mm x 50mm

Weights: Detector: 105g; Detector in Base: 157g

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

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High Temperature Detector
Detector Part No: 55000-401 IMC

Base Part No 45681-210

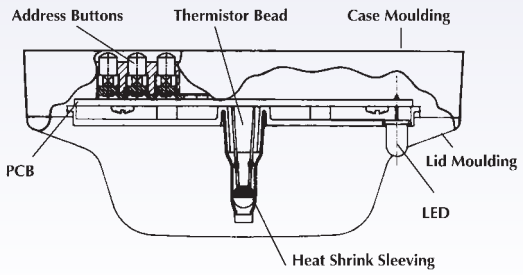
Specifications are the same as those for the standard temperature detector described above, apart from the following points:

Detector Type: Fixed Temperature

Detector Principles: Linear approximation designed to give 25 counts at 25°C and 55 counts at 90°C

***Guaranteed Temp. Range* (No condensation or icing):** -20°C to +120°C

Sensitivity: 25°C to 90°C: 2·17°C / Count -20°C returns 20 counts.



Sectional view - Temperature (Heat) Detector