# TEMPERATURE DETECTORS XPERT CARD ADDRESSED

Context Plus

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

**Standard Temperature Detector, XPERT style, 55000-400IMC**
**High Temperature Detector, XPERT style, 55000-401IMC**

LPCB 010p CE 0832

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 55°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**

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

***Communication protocol:*** Apollo XP95 pulse 5-9V

***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 2001 (BS5445 Pt 5 2001)

***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**

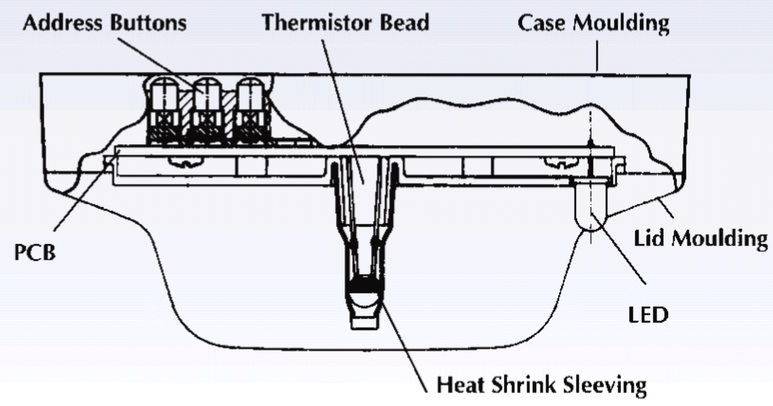
***Specifications are the same as those for the standard temperature detector described above, apart from the following points:***

***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