



**C4403A2, C4403B,  
C4403A1R**

**Heat Detectors**



Manufactured in the UK by C-TEC, our ActiV C4403 range of heat detectors offer outstanding detection performance at a very competitive price. Three variants are available - the C4403A1R rate-of-rise detector and the C4403A2 and C4403B fixed temperature detectors.

Suitable for use with virtually all known conventional fire alarm panels including C-TEC's market-leading CFP, FP, MFP and EP203 ranges, all variants are third-party certified to EN54 part 5 by leading independent certification body, Intertek, and also carry the prestigious pan-European recognised 'CertAlarm' System 5 mark.

Stylishly designed and easy-to-install, the IP42 rated detectors have a wide 6-33V DC operating voltage and include dual LED alarm indicating strips offering unrivalled 360° visibility.

The detectors are fully compatible with our C4408 range of ActiV bases, all of which include an integrated detector/base locking mechanism to prevent tampering. A plastic ID tag is also supplied with all C4408 range bases allowing engineers to identify which zone the detector has been connected to.

*Illustration shows a C4403A2 ActiV fixed temperature heat detector mounted on a C4408D base*



**CERTALARM**  
No. 000150

**Intertek**



0359-CPD-0183

## Key features

- ▶ Third-party certified to EN54-5 by leading notified approval body Intertek
- ▶ Carries the prestigious 'CertAlarm' System 5 mark
- ▶ Outstanding detection performance and durability
- ▶ Wide 6-33V DC operating voltage
- ▶ Three versions available - C4403A2 fixed temperature, C4403B fixed temperature and C4403A1R rate-of-rise
- ▶ Two 8mm x 2mm ultra-bright red LED indicating strips offering unrivalled 360° visibility when illuminated
- ▶ IP42 rated
- ▶ Suitable for use with virtually all known conventional fire alarm panels (see over for required alarm currents) and many 12V security systems
- ▶ Low current draw - just 30µA quiescent at 24V
- ▶ Sophisticated onboard detection algorithms help reduce false alarms by rejecting momentary abnormal readings
- ▶ Stylishly manufactured from white polycarbonate
- ▶ Compatible with our ActiV C4408D diode base or C4408 non-diode base (all bases include an integrated detector/base locking mechanism and ID tag)
- ▶ Simple 'click and twist' design and easy-fit base ensures reduced installation time and inspection costs
- ▶ Manufactured at C-TEC's Intertek, LPCB, VdS and BSI inspected headquarters in the north west of England
- ▶ Optical and multi-sensor variants also available (see our separate datasheets for details)
- ▶ Excellent discounts for quantity orders



## Application / Operation

There are two main types of heat detector – ‘fixed temperature’ and ‘rate-of-rise’. A ‘fixed temperature’ heat detector generates an alarm condition if the temperature within the protected area reaches a pre-determined level. A ‘rate-of-rise’ heat detector generates an alarm condition if it detects a sudden rise in temperature but also has a fixed pre-determined level at which it will trigger. Heat detectors are typically used in environments where smoke detectors cannot be installed. For example, in areas susceptible to fumes, airborne materials and smoke such as in kitchens, loading bays, workshops, wood mills and nightclubs.

## Technical Data

### Part number/description/class:

C4403A1R Rate-of-Rise Heat Detector (Class A1/R)

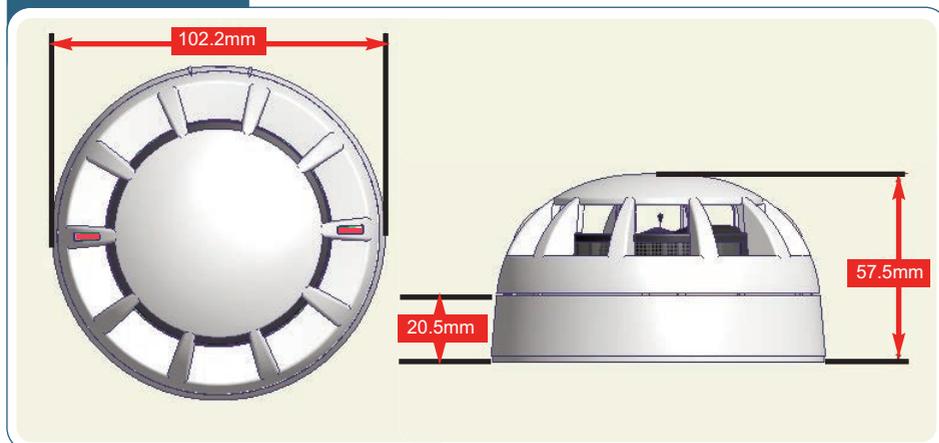
C4403A2 Fixed Temperature Heat Detector (Class A2)

C4403B Fixed Temperature Heat Detector (Class B)

<b>Sampling frequency:</b>	Once per second
<b>Supply wiring:</b>	2-wire monitored, polarity sensitive
<b>Supply/operating voltage:</b>	9 to 33V DC
<b>Quiescent current:</b>	30µA at 24V DC
<b>Switch on surge current:</b>	120µA for three seconds
<b>Alarm voltage:</b>	6 to 33V DC
<b>Alarm current:</b>	19mA @ 12-33V DC 11mA @ 9V DC 2.5mA @ 6V DC
<b>Min. holding voltage:</b>	6V DC
<b>Min. alarm holding current:</b>	2.5mA
<b>Alarm indicators:</b>	Two 8 x 2mm LEDs (illuminate red)
<b>Voltage req. to light LED:</b>	6V DC min
<b>Alarm reset voltage:</b>	<1V DC
<b>Alarm reset time:</b>	>0.5 seconds
<b>Remote output:</b>	Current source to the negative line, short-circuit protected (available via a C4408D or C4408 base). Max voltage 2.7V DC (the alarm current flows in the remote LED circuit)
<b>Max. application temp:</b>	50°C (C4403A1R & C4403A2) 65°C (C4403B)

<b>Max. static response temp:</b>	65°C (C4403A1R* & C4403A2) 85°C (C4403B) *Note the C4403A1R will also trigger if it detects a sudden rise in temperature
<b>Temperature range:</b>	-20° to +70°C
<b>Humidity:</b>	0% to 95% relative humidity
<b>Atmospheric pressure:</b>	Insensitive to atmospheric pressure
<b>IP Rating:</b>	IP42
<b>Dimensions (detector only):</b>	102.2mm diameter, 37mm deep
<b>Dimensions (detector in base):</b>	102.2mm diameter, 57.5mm deep
<b>Weight:</b>	Detector: 99g. Base: 55g.
<b>Detector materials:</b>	White polycarbonate outer casing rated to UL94 V-2 with nylon internal parts
<b>Base materials:</b>	White polycarbonate rated to UL94 V-2 with bright tin plated steel terminals fitted with nickel plated steel screws/washers
<b>Compliance:</b>	EN54-5:2000 + A1:2002 (Fire detection & fire alarm systems. Heat detectors - Point detectors)
<b>Certifications &amp; approvals:</b>	Third-party certified to EN54-5 by notified approval body Intertek. The range also carries the pan-European recognised CertAlarm System 5 mark. The approval certificate can be viewed at <a href="http://www.c-tec.co.uk">www.c-tec.co.uk</a>
<b>Compatible Bases:</b>	C4408D Diode Base; C4408 Non-Diode Base

## Dimensions



0359-CPD-0183

**You're safe with C-TEC**

