

AS2020-00 / AS2021-00

CONVENTIONAL HEAT DETECTORS (FIXED TEMP. & RATE OF RISE)



Standard Features

- Choice of fixed temperature / rate-of-rise: 135°F (AS2020-00) or 190°F (AS2021-00) heat detector
- UL Listed spacing up to 60' by 60'
- 2 or 4 wire base compatibility, relay bases available
- Highly stable operation, RF/Transient protection
- Low standby current, 35µA nominal
- Two built-in power/alarm LEDs for 360° viewing
- Fully electronic operation
- Power/alarm LEDs confirm detector status

Technical Specifications

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| Supply Voltage | 17.7 - 30VDC (4 wires) 15 - 33VDC (2 wires) |
| Standby Current | 40µA @ 24 VDC |
| Surge Current | 160µA max @ 24 VDC |
| Alarm Current | 150mA max @ 24 VDC |
| Contact Rating | N/O - 150mA max @ 24 VDC |
| Case Material | Bone PC / ABS Blend |
| Ambient Temperature | 32°F - 120°F (0°C - 49°C) |
| Operating Humidity | up to 93%, non-condensing |

Engineering Specifications

Automatic heat detectors where ambient temperatures do not exceed 120°F shall be the AS2020-00 fixed temperature/ rate-of-rise heat detector rated at 135°F. For areas where ambient temperatures exceed 120°F, but not 160°F, the AS2021 fixed temperature/rate-of-rise heat detector rated at 190°F shall be used. Electrical contacts shall be normally open, rated at 150mA @ 24VDC. Heat detectors shall be installed in accordance with National Fire Protection Association Standard 72, the spacing assigned by Underwriters Laboratories and in accordance with the rules and regulations set forth by the local authorities having jurisdiction.

Ordering Codes

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|------------------|---|
| AS2020-00 | Conventional FT / ROR Heat Detector 135°F |
| AS2021-00 | Conventional FT / ROR Heat Detector 190°F |
| AS2050-00 | Conventional 4" Base |
| AS2051-00 | Conventional 6" Base |

Application

The AS2020 and AS2021 fixed temperature / rate-of-rise heat detectors are suited for installation where high heat output fires are expected or in areas where ambient conditions would not allow use of other detection methods. Heat detectors are intended for protection of property. Do not rely on heat detectors for life safety protection. Where life safety is a concern, smoke detectors must also be used. A UL listed fire alarm panel must electronically supervise the AS2020 and AS2021 heat detectors.

All conventional devices are mechanically compatible with Avenger bases. Please check individual panel listings for appropriate listed bases.

Product Overview

The AS2020 and AS2021 fixed temperature / rate-of-rise heat detectors are suited to detect in the presence of slow or fast rising temperatures due to burning combustibles.

The construction of these models incorporate a thermistor heat element protected from damage by the built-in, durable plastic guard. These electronic heat detectors incorporate two power/alarm LEDs for 360° indication of status. In standby condition the power LEDs flash Green. In an alarm condition the LEDs latch on Red. The VF2020 and VF2021 electronic heat detection circuitry performs the same function as a Mechanical Device but with Electronic Precision. If the heat rise is less than 12°/minute the detector will not alarm until it reaches its alarm temperature (135° or 190° ± 7.5°F). If the heat rise is greater than 12°/minute the detector will alarm immediately giving an early warning signal and latching the Red LEDs on.