

Fire detection and evacuation solutions that save lives.

Orbis – Heat Detector

Features

- Can be used for applications where smoke detectors are unsuitable
- Ideal in environments that are dirty or smoky under normal conditions
- Red flashing LED at StartUp confirms the device is operating
- SensAlert, yellow flashing LED, indicates faulty operation
- FasTest takes just four seconds to test and confirm detectors are functioning correctly

Description

The Orbis Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature. Heat detectors are used in applications where smoke detectors are unsuitable.

The Orbis range incorporates six heat detector classes to suit a wide variety of operating conditions. All heat detectors in the Orbis range are tested as static or rate-of-rise detectors and are classified as A1R, A2S, BR, BS, CR and CS.

Orbis heat detectors have an open web casing that allows air to flow freely across a thermistor which measures the air temperature every 2 seconds. A microprocessor stores the temperatures and compares them with pre-set values to determine whether a fixed upper limit, the alarm level, has been reached.

In the case of rate-of-rise detectors the microprocessor uses algorithms to determine how fast the temperature is increasing.

Static heat detectors respond only when a fixed temperature has been reached. Rate-of-rise detectors also have a fixed upper limit but they also measure the rate of increase in temperature. A fire might thus be detected at an earlier stage than with a static detector so that a rate-of-rise detector is to be preferred to a static heat detector unless sharp increases of heat are part of the normal environment in the area protected by the heat detector.



Heat Detector

Specifications

| | |
|-----------------------|-----------------------------|
| Operating Voltage | 8.5 to 33 VDC |
| Quiescent current | 65µA at 24 VDC |
| Alarm current | 40mA at 24 VDC |
| Remote output | 1.2kΩ to -ve supply |
| Dimensions | 100mm Dia x 51mm H inc base |
| Operating temperature | -40°C to +70°C (no icing) |
| Relative humidity | 0 to 98% (non condensing) |
| IP rating | IP23D (indoor use) |
| Weight | 70 grams (130g inc base) |
| Approvals | EN54-5 |

Refer Product Guide for Flashing LED Items Numbers.
For further information refer Product Guide, MAN1507.

Item Numbers

| | LPCB (EN54-5) | SAI Global (AS7240-5) | Activfire (AS7240-5) |
|----------------------------------|------------------|-----------------------|----------------------|
| Orbis A1R Heat Detector | ORB-HT-11001_AMP | 4106-1053 | |
| Orbis A2S Heat Detector (Type B) | ORB-HT-11002_AMP | 4106-1054 | 201-0504 |
| Orbis BR Heat Detector (Type A) | ORB-HT-11003_AMP | 4106-1055 | 201-0500 |
| Orbis BS Heat Detector | ORB-HT-11004_AMP | 4106-1056 | |
| Orbis CR Heat Detector (Type C) | ORB-HT-11005_AMP | 4106-1057 | 201-0508 |
| Orbis CS Heat Detector (Type D) | ORB-HT-11006_AMP | 4106-1058 | 201-0510 |

