

Orbis Intrinsically Safe – Heat Detector (Aus)

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 Intrinsically Safe 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 seven 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, A1S, 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.

Classification

II 1G Ex ia IIC $-40^{\circ}\text{C} < \text{Ta} < +40^{\circ}\text{C}$ (T5)
 $-40^{\circ}\text{C} < \text{Ta} < +60^{\circ}\text{C}$ (T4)

BASEEFA Certificate Number

ATEX - Baseefa 06 ATEX 0007X
 IECEx - IECEx BAS 06.0002X



I.S. Heat Detector

Item Numbers

201-0134	Orbis I.S. A1R Heat Detector Rate of Rise
201-0135	Orbis I.S. A1S Heat Detector Static
201-0601	Orbis I.S. A2S Heat Detector Static
201-0600	Orbis I.S. BR Heat Detector Rate of Rise
201-0607	Orbis I.S. BS Heat Detector Static
201-0602	Orbis I.S. CR Heat Detector Rate of Rise
201-0603	Orbis I.S. CS Heat Detector Static

Specifications

Operating Voltage	14 to 28V DC
Quiescent current	80µA at 24V DC
Dimensions	100mm Dia x 50mm H inc base
Operating temperature	-40°C to +70°C (no icing) Class T5: -40°C to +40°C Class T4: -40°C to +60°C
Relative humidity.	0 to 98% (non condensing)
IP rating	IP23D (indoor use)
Weight	70 grams (140g inc base)
Approvals	EN54-5

For further information refer respective Product Guide MAN3041.



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