

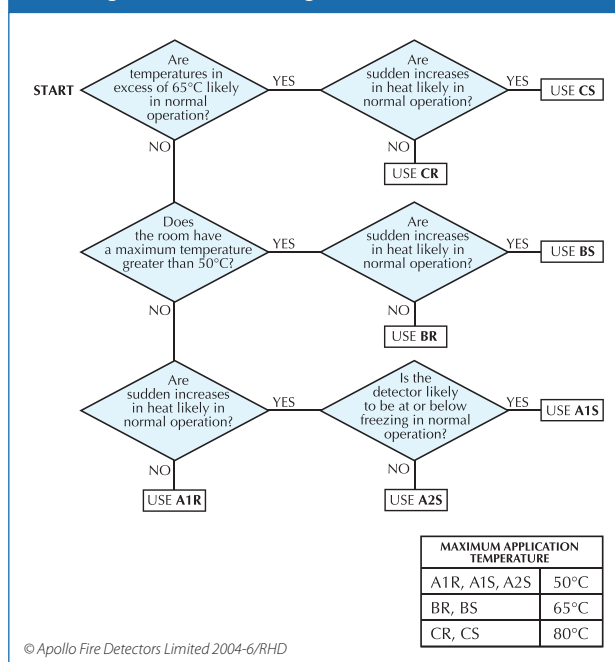


## Environmental performance

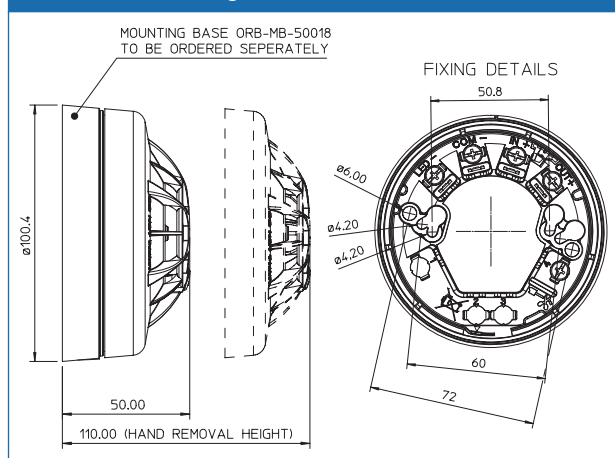
The environmental performance is similar to that of the Orbis IS optical smoke detector but it should be noted that heat detectors are designed to work at particular ambient temperatures (see Fig 1).

Also classification and BASEEFA Certificate Number are the same as for the optical smoke detector.

Choosing a Heat Detector Fig 1.



## Dimensional Drawings



## Technical Data

Specifications are typical at 24V, 23°C and 50% relative humidity unless otherwise stated.

Principle of detection: Measurement of heat by means of a thermistor.

Sampling frequency: Once every 2 seconds

### Electrical

Supply voltage: 14—28V DC

Supply wiring: 2 wires, polarity sensitive

Polarity reversal: Not allowed

Power-up time: <20 seconds

Minimum 'detector active' voltage: 12V

Switch-on surge current at 24V: 105µA

Average quiescent current at 24V: 80µA

Alarm load: 325Ω in series with a 1.0V drop

Minimum holding voltage: 5V

Minimum voltage to light alarm LED: 6V

Alarm reset voltage: <1V

Alarm reset time: 1 second

Remote output LED (-) characteristic: 4.7kΩ connected to negative supply

### Mechanical

Material: Detector and base moulded in white polycarbonate

Alarm indicator: Integral indicator with 360° visibility (See Table 1 on page 55 for details of flash rate)

Dimensions and weight of detector: 100mm diameter x 42mm Weight, 70g (in base) 100mm diameter x 50mm Weight, 130g

### Environmental

Operating and storage temperature: -40°C to +70°C  
 Operating temperature is restricted by the intrinsic safety gas classification.  
 Class T5: -40°C to +45°C  
 Class T4: -40°C to +60°C  
 The detector must be protected from conditions of condensation or icing.

Humidity: 0% to 98% relative humidity (no condensation)

Wind speed: Unaffected by wind

Atmospheric pressure: Insensitive to pressure

IP rating to EN 60529: 23D 1992\*:

Electromagnetic compatibility: The detector meets the requirements of BS EN 61000-6-3 for emissions and BS EN50 130-4 for susceptibility

\*The IP rating is not a requirement of EN 54-5 2001 since smoke detectors have to be open in order to function. An IP rating is therefore not as significant as with other electrical products.