#### features

- Dual thermistors
- Rate-of-rise fixed temperature and high fixed temperature models
- Common base for optical, ionisation and thermal sensors
- Addressable-analogue communication
- Stable communication technique with noise immunity
- Low stand-by current
- Rotary decade 01 to 99 address switches
- Remote LED output as standard
- Dual LED design provides 360° viewing angle
- Visible LED's blink every time the detector is addressed (optional), and illuminate steady on alarm
- Built-in functional test switch activated by external magnet
- Optional relay, isolator, or sounder bases

The Morley-IAS range of intelligent thermal detectors are used with the ZX series intelligent multi protocol fire alarm control panels to measure thermal levels caused by a fire and report the analogue level of the thermal measurement to the control panel. The use of analogue information provides significant benefits to the end user, installer and serviceman in ways which are not possible with a conventional type system. Since this detector is also addressable, it will help to quickly locate a fire during its early stages.

The MI-FHSE and MI-HTSE are fixed temperature analogue addressable sensors employing low mass thermistors and microprocessor technology for fast response and linear temperature sensing. Their linear response allows these sensors to be used to signal temperatures over the range of 58°C (Class A1S) to 78°C (Class BS).

The MI-RHSE uses the same thermistor and microprocessor technology to provide an alarm when the rate of rise in temperature exceeds 10°C/minute (typical) or if the temperature exceeds a threshold of 58°C (Response Class A1R).

All of the thermal detectors have two integral alarm LEDs which provide local visual indication of the sensor status. These LED's provide a dual function. In the event on an alarm, they are switched ON continuously, and can also be programmed to either blink when polled by the panel or remain off during normal conditions.



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# **Morley-IAS** Intelligent **Thermal Detector** Data Sheet



## mechanical

Dimensions (Height): 51 mm installed in B501

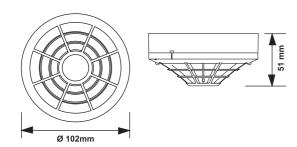
Weight: 170 gr. (6 oz)

Operating temperature: - 10°C to 60°C

Humidity: 10% to 93%
non-condensing

Compatible bases: B501,B524IEFT, B524RLY

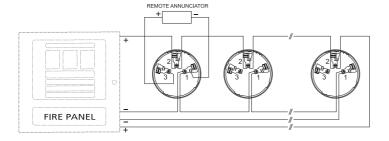
Figure 1 - MI-FHSE fitted in B501 base.



#### electrical

Operating voltage: 15 to 32 Vdc
Alarm Current (LED on): 7mA maximum
Stand by current: 200 µA maximum
Terminals: SEMS screws with

clamping plates for upto 2.5 mm<sup>2</sup> (13 AWG) wire



# approvals





REF: 199n/04

REF: 199n/03



REF: 199n/05

## part numbers

**EN54** 

MI-RHSE Rate of rise heat sensor. Class

A1R. (LPCB REF:199n/04)

**MI-FHSE** Fixed temperature (135%, 57°C)

sensor, Class A1S. (LPCB REF:199n/03)

MI-HTSE Fixed high temperature sensor

(78°C, 172°F), Class BS. (LPCB REF: 199n/05)

accessories

**SMK400** Surface mounting kit provides

for entry of surface wiring conduit. For use with B501

base only.

**RMK400** Recess mounting kit. For use

with B501 base only.

**B501** Detector mounting base

**B501IEFT** Detector mounting base fitted

with loop isolator.

Note:

1) For Class A1S & A1R sensors the maximum ambient temperature should not exceed 45°C to minimise occurance of unwanted alarm conditions.

2) For Class BS sensors the maximum ambient sensors should not exceed 68°C to minimise occurance of unwanted alarm conditions.

**Your Local Distributor**