

# CONVENTIONAL - 78 °C Fixed Temperature Thermal Detector

## Model 4351EA

### Overview

#### Features

- Low profile design
- Low current draw
- Backward compatible with Series 100 detector range of bases
- Wide operating voltage 8 to 30VDC
- Bi-colour LED detector status indicator
- Automatic drift compensation
- Programmable sensitivity
- Addressable feature
- Advanced maintenance features via remote hand-held test unit
- Range of detector bases available
- Tested and approved to EN54 – 5:2000 Class BS (Amendment 1)
- Extended warranty



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B-9073-FD-K 378-f

### Description

The 4351EA thermal detector forms part of the Series 300 range of conventional detectors. This range of detectors has been produced using the latest in manufacturing and design techniques, pushing out the boundaries of existing conventional detector technology. With its multitude of innovative features, the Series 300 is a detector which 'acts conventionally, thinks intelligently'.

The 4351EA thermal detector incorporates an Application Specific Integrated Circuit (ASIC). Combined with the latest in thermal element technology the detector provides efficient and accurate detection of fires, especially in environments such as boiler houses or kitchens where smoke detectors are inappropriate due to the high level of airborne contamination.

The 4351EA and other detectors in the Series 300 range are backward compatible with the Series 100 detector bases, thus providing the capability to upgrade, extend and maintain existing Series 100 installations.

The 4351EA detector incorporates a bi-colour LED indicator. The integral LED changes colour according to the detector's status - Green = Normal, Red = Alarm. This benefits the user by providing clear, instant visual indication of the detector's condition. The Green LED can be programmed for blink/no blink operation.

The remote hand-held programming unit can also be used in conjunction with the Series 300 range of detectors to gain access to other advanced features. The features available include: read/write last maintenance date, read value of thermal element and perform an alarm test. Each unit can be given a unique address that will be displayed on the S300ZDU whenever the detector is in alarm.

All the features via the hand-held programming unit are achieved effectively and effortlessly without the need to remove the detector or having to gain direct physical access (other than by the use of 'No Climb Products' or similar servicing tool), saving valuable commissioning/maintenance time.

They provide the end user with the confidence to know that his system is being regularly serviced and that it is operating at its optimum level, with minimum disruption to his own business activities.

# Architect/Engineer Specifications

## 4351EA 78°C Fixed Temperature Thermal Detector

In addition to the comprehensive programming tool, a simple laser based alarm test unit is also available. The coded signal transmitted by this device can instruct the detector to generate a full alarm condition at a range of up to 5 metres from the detector, and is an ideal tool for initial commissioning and routine system testing.

A variety of detector bases can be used with the 4351EA detector, providing application flexibility and compatibility with a wide range of Fire Alarm Control Panels. All bases are fitted with a shorting spring to permit circuit testing prior to fitting the detector and have a tamper resistant feature, which when activated prevents removal of the detector without the use of a tool.

All System Sensor products are covered by our extended 3 year warranty.

## Electrical Specifications

Operating Voltage Range	8 to 30VDC (Nominal 12/24VDC)
Typical Standby Current @ 25pC	65µA @ 24VDC (LED no blink)
Maximum Alarm Current (LED On)	80mA @ 24VDC (Limited by panel)

## Environmental Specifications

Application Temperature Range	-30°C to +70°C
Humidity	5 to 95% Relative Humidity (non condensing)

## Mechanical Information

Height	38mm (plus 9mm for B401 base)
Diameter	102mm
Weight	105g (plus 60g for B401 base)
Max Wire Gauge for Terminals	0.75mm <sup>2</sup> to 2.5mm <sup>2</sup>
Colour	Pantone Warm Grey 1C
Material	Bayblend FR110

## Product Range

Compatible Bases (see notes)	B401 Standard Base
	B401SD Standard base with schottky diode
	B401R Resistor base with 470 ohm resistor
	B401RSD Standard base with 470 ohm resistor and Shottky diode
	B401RM Standard recess base with 470 ohm resistor
	B401DG Deep base
	B401DGR Deep base with 470 ohm resistor
B401DGSD Deep base with Shottky diode	
Accessories	S300RPTU Remote Programming and Test Unit
	S300RTU Remote Test Unit
	S300SAT Remote Programming Interface Unit
	S300ZDU Zonal Display Unit
Other Devices in range	2351E, 2351TEM, 5351EA, 5351TE

### Notes

1. Bases with other resistor values are available to suit the requirements of most Fire Alarm Control Panels.

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Installation information: in order to ensure full functionality, refer to the installation instructions as supplied.