Protec Fire Detection plc

6000*PLUS*/OPHTCO/S - Optical Smoke Heat and CO Sensor Plus Sounder

Fire Detection - Addressable

- Multiple Technology Sensor
- Combined Smoke, Heat and Carbon Monoxide Sensors
- Ideal Multi-Application Sensor
- Integrated Electronic Sounder
- Loop Powered
- Low Current
- Programmable Volume Control
- Integral Short Circuit Isolator
- Protec Algo-Tec™ 6000*PLUS* Protocol
- Devices Display Address Number
- FAST™ Addressing
- Unprecedented False Alarm Rejection

The Protec Algo-Tec™ 6000*PLUS* sensor range has been developed to incorporate advanced fire sensing technology, electronic sounders, high intensity LED warning beacons and speech enhanced talking sounder capability, all integrated within the sensor head and powered from the loop.

6000*PLUS*/OPHTCO/S Interactive addressable high performance optical smoke, heat and carbon monoxide multi-sensor.

The ultimate in multi-sensor technology, providing a formidable weapon in the pursuit of reliable fire detection and the avoidance of unwanted or false alarms. The sensor provides total confidence that when initiated, there really is a fire threat.

The sensor incorporates infra-red light scattering for smoke detection, with thermal enhancement of the optical sensitivity, temperature detection equivalent to grade A2, and a third channel incorporating a carbon monoxide (CO) sensing element.

The combination of optical smoke, heat and carbon monoxide gas sensing technology within one fire detector head provides the ideal solution. The sensor can now detect free burning chemical fires, fires producing smoke and low levels of CO and heat, to deep seated smouldering fires, which produce little heat and smoke but large amounts of CO.

Combining the results from all sensing channels enables rapid fire detection with rejection of false alarms and increased sensor reliability.

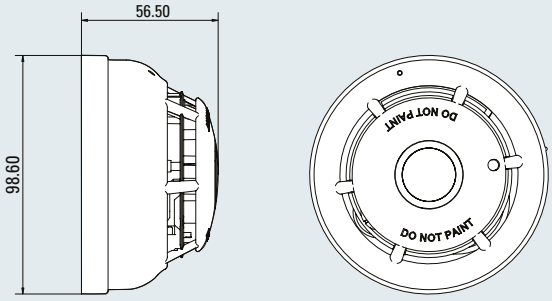
Sensor Sounder - The Protec Algo-Tec™ 6000*PLUS*/OPHTCO/S sensor is equipped with an integrated loop powered electronic sounder with three programmable sounder tone options, constant, pulse or warble selectable by the control panel along with adjustable volume control. A loop short circuit isolator is also incorporated within the head. The sensor sounder tones are compatible with the full range of Protec 6000 electronic sounders.

Fire Detection - Addressable

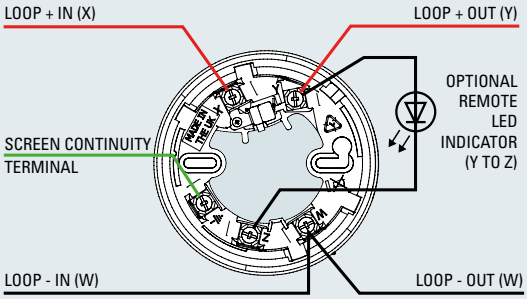
6000*PLUS*/OPHTCO/S
Technical Specification

LPCB ref. no. 201z/01

Dimensions (mm)



Typical Wiring using 6000*PLUS*/BASE



Technical Specification:

Environment	-10˚C to +50˚C (95% R.H. non condensing)
Ingress Protection	IP41
Weight (excluding base)	105g
Loop Powered	Yes
Loop Standby Load	0.45mA
Loop Alarm Load	5.45mA
Loop Voltage	18 - 28V
Isolator	Yes
Device Protocol	Algo-Tec™ 6000*PLUS*
Product Approval	LPCB Certificate No: 201z/01 EC Certificate No: 0832-CPD-1177 DoP No: PFD-CPR-0036 Relevant Standard: EN54 Part 3, 5, 7 & 17 AS7240 Part 15 (5&7)

FAST™ Addressing

FAST™ (Firmware Addressed Secure Technology). Each Algo-Tec™ 6000 device is manufactured with a unique serial number factory programmed (firmware embedded) and device label. The label includes the serial number on two bar-coded segments, two of which are removable by the installer (one is a spare). The label is attached to an address location booklet, which is handed to the engineer prior to commissioning. During commissioning the engineer scans the address location booklet to download the loop, address and serial number details. The downloaded data is then checked and stored within the secure non-volatile memory of the control panel and the addressing is complete. FAST™ and easy eliminating troublesome and time consuming setting of address cards and DIL switches. FAST™ addressing is more secure than 'SOFT ADDRESSING' and easier to extend or amend, allowing greater flexibility and reduced costs.

RVAV™

RVAV™ (Remote Visual Address Verification). Once the system has been FAST™ addressed the correct location of each Algo-Tec™ device can be easily identified, using the device's in-built LED to indicate the device address number. The LED has a simple coded pulse, making it quick and easy to count. Because the control panel sends the RVAV™ signal to each device, the RVAV™ walk test is confirming that the devices are correctly addressed and correctly communicating. As-fitted Drawings and device labels can also be checked during RVAV™ walk test, without the disruption of activating devices commonly associated with other types of system.

Tone Options

Warble Tone: 990Hz(250ms), 730Hz(250ms)
Continuous Tone: 990Hz
Pulse Tone: 990Hz(500ms), Silence(500ms)

Tone Volume Options

The tone and volume are selectable at the control panel (measured at one metre):
High: 85dB(A), Mid: 75dB(A), Low: 65dB(A)

BASE Options:

6000*PLUS*/BASE
- Low profile common mounting base

6000*PLUS*/FFBASE
- Fast fixing semi recessed base

Note - base options above are included in the product approval.

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Company Policy is one of continuous improvement, we reserve the right to change specification without prior notice

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