ADEVA®

Advanced Intelligent Combine (Photoelectric Smoke / Temperature) Detector FCOT721 / FCOTI721

Overview

- Advanced intelligent detection functionality
- Fully digital adressing technology
- Includes Advanced ADEVA protocol
- New mechanical platform with revolutionary chaber offering improved false alarm immunity
    - Improved detection across multiple fire types
    - Improved resilience to false alarms through insects
    - Removed ris of false alarms through insects
- Available with or without single pole short circuit isolation with status control through the ADEVA protocol
- Optional inbuilt short circuit isolator
- Two sensor multi - criteria fire detector incorporating photoelectiric, and thermal sensing elements
- Three-colour LED detector status indicator
- Wide operating voltage 15 to 32VDC
- Rotary decade address switches
- Automatic drift compensation
- Pure white colour to compliments modern buildings
- %100 mechanical and electrical backwards compatibility
- New base design to compliment the detector
- Tested and approved to EN54-5:2000+A1:2002
    EN54-7:2000+A1:2002+A2:2006
    EN54-17:2005+AC:2007 (for isolator)

CE VdS

0786 - CPR - 21363   G214042
0786 - CPR - 21358   G214036

Description

The revolutionary Advanced Intelligent ADEVA range delivers a totally new detector platform that incorporates the new digital Advanced Intelligent ADEVA protocol.The new protocol delivers more devices on the loop and gives greater control, configurability and device management whilst enabling the overall system to be optimised to the location and use of the building with far greater flexibility than ever before.

The multi - criteria multi - sensor FCOT721 Photo Thermal detector uses thermal assistance to the core photoelectric smoke detector to give enhanced false alarm immunity and faster response to a wide range of incipient fires. The plug-in unit combines two separate sensing elements that are managed by embedded software to act as a single unit. The FCOT721 conforms to EN54-5, a 58^0C fixed temperature and rate of rise thermal, with the smoke detection element conforming to EN54-7.

'Drift compensation' algorithms are one of the key features of the FCO731 detector.These algorithms are ensure a consistent alarm sensitivity threshold for periods between service intervals. This provides the user with both a reduction in the freq uency of nuisance alarms and maintenance savings by extending the period before cleaning of the detector chamber is reuired.
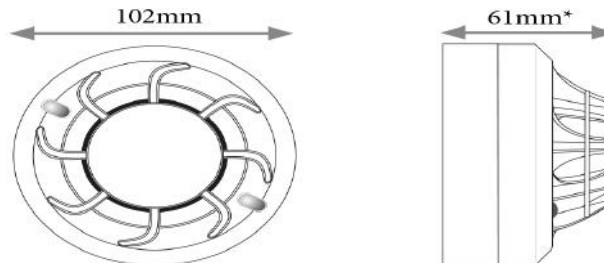
The thermal detection function combines thermistor technology with a software corrected linear temperature response. In areas where the normal daytime activities may potenrially reverting to full photothermal operation during unoccupied periods.

The sensing elements of the FCOT721 are panel controllable so the sensitivity thresholds of each element can be charged by the panel offering the ability to customise the device for the changing use of the area it is protecting. The FCOT721 has two integral tri-colour LEDs that provide 360^0 local visual indication of the device status

All ADEVA detectors are environmentally friendly and meet the WEEE and RoHS legislative requirements, minimising end of life disposal costs, and are mechanically and electrically backwards compatible.

Architect/Engineer Specifications

All ADEVA products are covered by our extended 5 years monufacturer warranty.

Electrical Specifications - Standard Product (FCOT721)

Operating Voltage Range	15 to 32VDC
Maximum Standby	200µA at 24VDC (no communications) / 300µA at 24VDC (LED blink enabled, once every 5s)
Led Current	Red: 3.5mA at 24VDC
	Green: 7.0mA at 24VDC
	Yellow: 10.mA at 24VDC
Remote Output Voltage	22.5VDC at 24VDC
Remote Output Current	10.8mA at 24VDC
Additional Loop Resistance Using the B501AP	typ 20mohm (max 30mohm)

Electrical Specifications - Isolator Product (FCOTI721)

Operating Voltage Range	15 to 28.5VDC
Isolation Current	15mA at 24VDC
Maximum Continuons Current	1A (Switch Closed)

Environmental Specifications

Temperature Range	-30^{0}C to +80^{0}C
Humidity	5 to 93% Relative Humidity (non condensing)

Mechanical Information

Height	61mm installed in B501 base
Diameter	102mm installed in B501 base
Weight	99g (inc base)
Max Wire Gauge for Terminals	2.5mm^2
Colour	White
Meterial	PC/ABS

Sensitivity Settings

Alarm Level	1%/ft
Alarm Level 2	Adjusting 1% - 2%/ft
Alarm Level 3	2%/ft
Alarm Level 4	Adjusting 2% - 3.5%/ft
Alarm Level 5	3%/ft smoke
Alarm Level 6	ClassAIR

Product Range

Compatible Bases	B500 Series (B501, B501DG, B524RTE, B524HTR, B524IEFT-1) B501AP			
Other Devices in range	FCO731 / FCOI731 FCOTI781 / FCOII781 FCHR751 / FCHRI751	FCHF741 / FCHFI741 FCHH761 / FCHHI761 2251CTLE	7251 DNRE FTX-P1	2251EIS 6500
Other Colours in Range	Ivory			

*Note * When installed in a B501AP base*
† Do not install detectors in locations where normal ambient temperature exceeds 50°C