



# DOTD-230A

## Addressable Dual Heat and Smoke Detector

### Description

The new 200 series of analogue detectors has been developed using the most innovative technical advances. Its completely new design makes the 200 series one of the most elegant on the market, ideal for facilities in which the balance between functionality and aesthetics is necessary.

DETNOV's 200 range of analogue detectors is made up of 4 detector types. They are a 58°C rise-of-rate detector, a 78°C heat detector, an optical detector and an optical-heat detector. All of them are compatible with DETNOV's CAD-150 family of analogue control panels.

The 200 series of analogue detectors' addresses are assigned through the PGD-200 programmer. The use of this tool saves double address mistakes, because the programmer automatically handles the address to be assigned.

Connections between the analogue system's detectors and modules must be made with a 2 x 1.5 mm<sup>2</sup> twisted and shielded cable with a maximum length of 2 Km. To meet the EN-54 requirements, the wiring must be done in a closed loop. Precise short-circuit isolators must be installed to facilitate the location of possible faults. The loop accepts up to 250 elements.

The DOTD-230A optical-heat detector is based in an optical dark chamber, which, thanks to its design, avoids unwanted air flows and facilitates the guidance of the smoke to the optical sensor. The detection principle is based on Tyndall's effect; the detector goes into alarm status due to the scattered light caused by the smoke particles being received by the optical sensor. The camera is protected to avoid the entrance of dirt and insects. This detector also incorporates compensation algorithms which avoid false alarms due to dirtiness of the optical chamber, postponing equipment maintenance.

The DOTD-230A high-heat detector also incorporates a temperature sensor that detects a quick temperature increase in a period of time, or a temperature higher than 58°C.

In both the cases of detecting smoke and detecting heat, the heat detector will go into alarm state, and the detector's integrated LED will light up.

The 200 series detectors require the Z-200 base in order to connect. This connection base includes a blocking option which avoids it being tampered with. A tool is needed to remove the detector from the base.

Detectors in this series have non-polarity technology, facilitating system wiring and saving a huge amount of time in commissioning the system.

The protected area is 60 m<sup>2</sup> and the maximum installation height is 12 meters.

### Features

- Elegant design and low profile
- Dirtiness compensation
- Dirtiness and insect protection
- Rise-of-rate function
- 58°C static alarm function
- Two-wire connection without polarity
- Remote indicator port
- Compatible with DETNOV's analogue fire control panel
- Addresses from 1 to 250 in the loop
- EN54-5 and EN54-7 approval

## Applications

DOTD-230A detectors are suitable for any fire-protected area, because its double technology (smoke & heat) can detect any kind of fire.

## Technical features

<b>Detector</b>		
	Loop features:	
	Operating voltage:	From 22 to 38VDC
	Quiescent current consumption:	< 300 $\mu$ A
	Alarm current consumption:	< 11 mA
<b>Connections</b>		
	2 x 1.5 mm <sup>2</sup> twisted and shielded cable to a Z-200 base	
<b>Environment</b>		
	Operating temperature:	From -10°C to +70°C
	Relative humidity:	95% without condensation
	IP index:	IP20
<b>Technical features</b>		
	Head (height x $\varnothing$ ):	48 mm x 100 mm
	Base (height x $\varnothing$ ):	5 mm x 100 mm
	Material:	ABS
<b>Approvals</b>		
	EN54-5 and EN54-7	
	Certificate number:	0370-CPD-2006

## Dimensions

