



## DOTD-230A

## DOTD-230A-I

### Addressable dual heat and smoke detector

## Description

The 200 series of addressable 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 addressable detectors is made up of 4 detector types, all of them available with and without isolator. There 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 and CAD-250 families of addressable control panels.

The 200 series of addressable detectors' addresses are assigned through the PGD-200 programmer (Isolator version support auto addressing). The use of this tool saves double address mistakes, because the programmer automatically handles the address to be assigned.

Connections between the addressable 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 (changing the section of the cable, number of element and using calculation software loop can reach up to 3500m). 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 addresses.

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 without isolator have non-polarity technology, facilitating system wiring and saving a huge amount of time in commissioning the system.

## 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 addressable control panel
- EN 54-5, EN 54-7 and EN 54-17 approved
- Addresses from 1 to 250 in the loop
- DOTD-230A-I with isolator. Connection with polarity

## Applications

Detnov's complete range of 200 series detectors allow reliable fire detection thanks to its advanced analysis technology. Depending on the risk to be protected, you will have to choose the topology of the sensor of the detector, you can choose between: optical, thermal, thermovelocimetric or the combination of said sensors. Detnov's fire detector has been developed to ensure a quick reaction to fires, meeting the highest quality standards and certification required in the market. A unique reliability when detecting and protecting installations to reduce false alarms, being suitable for the most demanding applications.

## 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>Physical features</b>	
Head (height x Ø):	42 mm x 100 mm
Base (height x Ø):	5 mm x 100 mm
Material:	ABS
<b>Approvals</b>	
	EN54-5, EN54-7 and EN54-17 (DOTD-230A only EN 54-5 and EN 54-7)
DOTD-230A Certificate number:	0370-CPR-2006
DOTD-230A-I Certificate number:	0370-CPR-1862

## Dimensions

