

FINSECUR®

Solutions de sécurité incendie

Installation and operation manual

01_DETCO_NT010 rév A1

CAP 112

Conventional optical smoke detector



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Item code : DETCO101
EN 54-7
CAP112
Conventional optical smoke detector
Specifications : See 01.DETCO.NT010

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→ PRESENTATION

How the optical detector works ?

The sensing element of the detector is composed of an optical chamber which uses the Tyndall effect. A flow of light, whose wavelength is situated in the infrared, allows the sensor to detect the introduction of tiny particles coming into the analysis chamber.

The detector and the emitter are opposite. Only the reflection of the light signal are taken into account. The chamber is light-tight in order to avoid ambient light entrance.

The flow of light reflected by the particles of smoke towards the infrared receptor is amplified and permanently analyzed. When the amount of received light is above a treshold, the detector is in alarm.

→ INSTALLATION

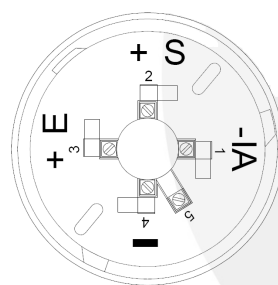
Mount the base by fixing it firmly. Connect according to the enclosed wiring diagram, respecting the polarities.

In case you lay a coating such as paint near to the detector, make sure to protect it against any possible pollution. Put the control panel into service and proceed to the recommended tests in the panel user manual. In particular, operate a detection test with an adequate device (specific test aerosol for smoke detectors for instance).

→ OPERATION

In case of detection, the red indicator of the detector turns on and a signal is sent to the control panel by mean of an overconsumption of current. The red indicator is on until the reset of the panel.

Proceed to periodical tests on the detector (at least twice a year). These operations must be performed by a qualified company.



Terminal	Name	Connection
1	-IA	- remote indicator
2	+ S	+ line output
3	+ E	+ line input
4	-	0 V
5		Not used

→ TECHNICAL CHARACTERISTICS

Material : moulded white ABS

Wiring base : reference S100 (item number ACCDE001)

Parameter	Min.	Typical	Max.	Unity
Supply voltage	8,5	12	30	V
Quiescent current	60	70	80	μA
Alarm current	23	25	27	mA
Fault current	10,5	12,5	14,5	mA
Output voltage on remote indicator output	9,5	-	15	V
Current limitation on remote indicator output	-	-	10	mA