



Interactive optical smoke detector with isolator

- Standard EN54-7, EN54-17, EN54-18.
- Security addressing
- CE0333 certified according to CPD

The Optical smoke detector analyzes an atmosphere by reflection of a light on the particles of smoke according to **TYNDALL effect**. It detects especially the **cold and visible smoke particles** ($0,3\mu$ m to 2μ m) produced in the early stages of a fire. The threshold of response of alarm is regulated to obtain the value $m=0,2db/m\pm0,03$ according to standard **EN54-7**.

OA12 includes a developed technology (*microprocessors, smd components*) which means precision and high reliability. A specific head detection fixed by a single ceiling base.

OA12 is dedicated to interactive fire detection panels.

The smoke detector **OA12** is designed to be installed under flat ceiling with heights ranging between **2,5** *m* **and 12** *m* and this, in healthy and more or less ventilated buildings.

The maximum supervised surface is **80m² by detector**; however it is preferable to refer to the local rules of installation recommended in particular when the characteristics of the installation differ **from those stated above. Eight levels of sensitivity** are available while programming the fire detection panel (from 0,1dB/m to 0,35 dB/m).

OA12 has an isolator circuit embedded enabling to protect the loop lost in case of short circuit. OA12 is conform with the **EN-17 for the short circuit isolator**



Main characteristics

- Photoelectric scattering (Tyndall effect)
- **EN54-7** for the smoke optic detection
- 1 remote indicator output
- Cable section max 2,5mm²
 - **8 levels sensitivity** setting (0,1 dB/m to 0,35 dB/m)
 - Embedded circuit short-circuit isolator (EN54-17)
 - **Constant sensitivity** thanks to auto correction

| Ром | ver supply specification |
|-------------------------------|---|
| Main supply voltage | 12Vdc to 28 Vdc |
| Nominal main supply voltage | 24 Vdc |
| Quiescent current (24 Vdc) | 140μA with base isolator closed 500μA with base isolator open |
| Alarm current (24 Vdc) | 5mA ± 1mA(15mA if equipped with optional R05) |
| Fault current (24 Vdc) | 140µA |
| Remote alarm indicator output | Individual command: 5mA ± 1mA |
| Med | chanical characteristics |
| Unit weight | 130g |
| Unit dimensions (in mm) | H:55 D:104 |
| Unit row material | ABS |
| Unit colour | White |
| IP rating | IP32 |
| Mounting mode | Base |
| Fixing | - distance between centres: 50mm to 60mm - under ceiling: 2 screws Ø 4 |
| Cl | limatic characteristics |
| Operating temperature | -30°C to +60°C |
| Storage temperature | +10°C to +50°C |
| Operating relative humidity | ≤ 93% |
| Storage relative humidity | ≤ 85% |



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CONNECTION

