



# MA12

## Interactive optical / heat detector with isolator

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

**MA12** temperature heat/optical smoke detector consist of a photo electric light scatter made sensitive by a thermal element. This detector detects visible smokes with or without heat emission.

The threshold of alarm of the heat element is 68°C.

**MA12 detector** analyses 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** (0,3µm to 2µm) produced in the early stages of a fire.

The threshold of response of alarm is regulated to obtain the value  $m=0,2\text{db/m}\pm 0,03$  according to standard **EN54-7**.

**MA12** includes a developed technology (**microprocessors, smd components**) which means precision and high reliability. A specific head detection fixed **by a single ceiling base**.

**MA12** is dedicated to **interactive fire detection panels**.

The smoke detector **MA12** is designed to be installed under flat ceiling with heights ranging between **2,5 m and 12 m** in healthy and more or less ventilated buildings.

The maximum supervised surface is **80m<sup>2</sup> 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).

**MA12** has an isolator circuit embedded enabling to protect the loop lost in case of short circuit and optionally can receive a relay module R05. **MA12** is conform with the **EN54-17** for the **short circuit isolator** and **EN54-18** for the **relay circuit**.



### Main characteristics

- Photoelectric scattering (Tyndall effect)
- Optical element made sensitive by thermal element
- **EN54-7** for the optical smoke detection
- 1 remote alarm indicator output
- Lockable
- Cable section max 2,5mm<sup>2</sup>
- **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

### **Power 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 opened
Alarm current (24 Vdc)	5mA ± 1mA (15mA if equipped of optional R05)
Fault current (24 Vdc)	140µA
Remote alarm indicator output	Individual command: 5mA ± 1mA

### **Mechanical 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

### **Climatic characteristics**

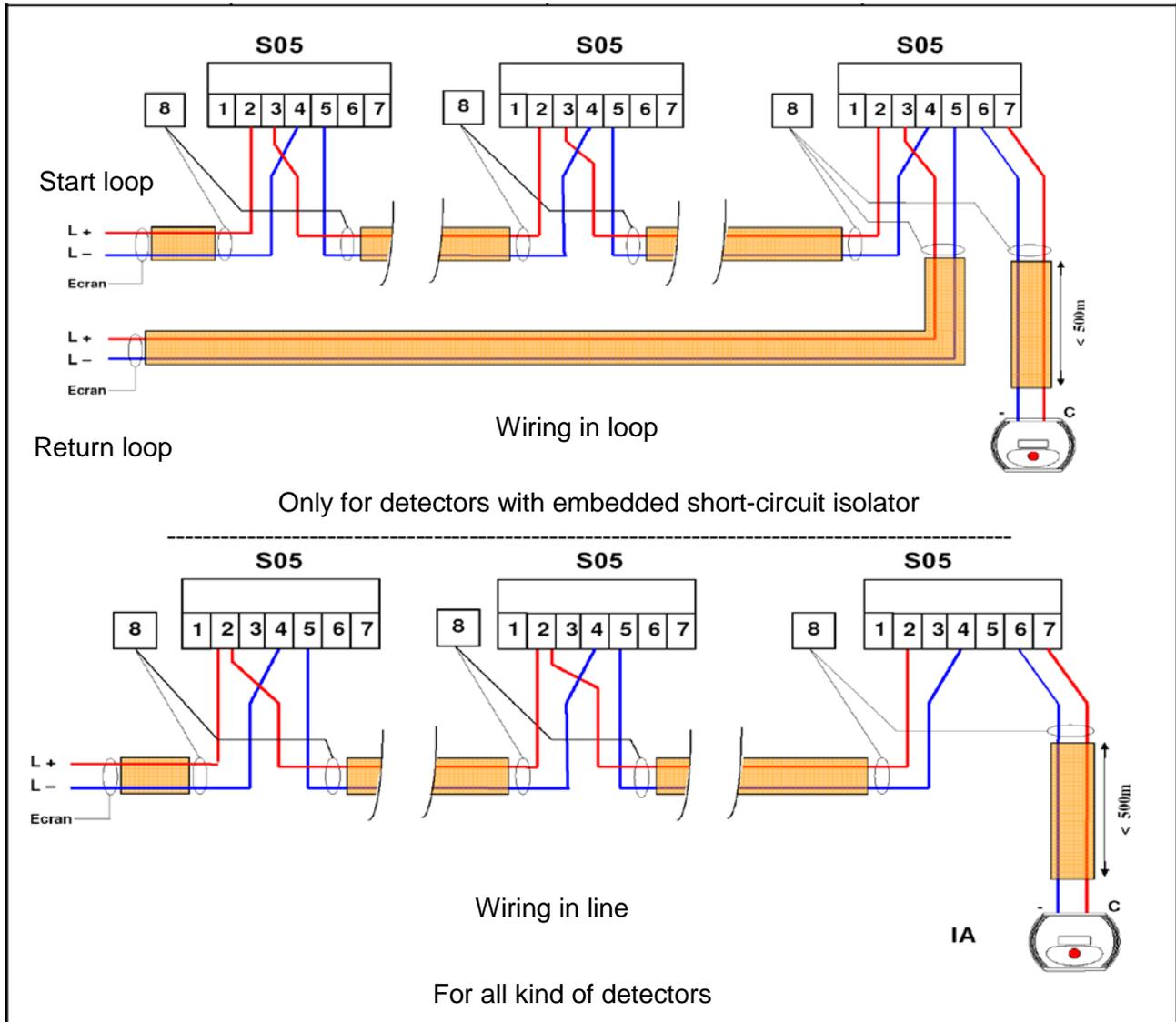
Operating temperature	-30°C to +50°C
Storage temperature	+10°C to +50°C
Operating relative humidity	≤ 93%
Storage relative humidity	≤ 85%



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### CONNECTION



PROFILE VIEW



TOP VIEW



BASE S05



IND05



#### REFERENCE

MA12

S12

#### ACCESSORIES

IND05

IAA

SOUND05

BRI

BRI/EM

#### DESCRIPTION

Interactive optical/heat detector

Base detector

Remote alarm indicator

Remote alarm indicator, for more than one detector

Base with internal sounder 95dB

Universal base with gland holes for 05 detectors range

Waterproof universal base with gland holes for 05 detectors range

