MA05

Interactive optical / heat detector

- *Standard EN54-7 Ed2000*
- *Security addressing*
- *CE certified according to CPD*

MA05 temperature heat/optical smoke detector consists 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.

MA05 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* (0,3µm to 2µm) produced in the early stages of a fire. The threshold of response of alarm is regulated to obtain the value m=0,2db/m±0,03 according to standard *EN54-7*.
MA05 includes a developed technology *(microprocessors, smd components)* which means precision and high reliability.
A specific head detection fixed by a single ceiling base.
MA05 is dedicated to interactive fire detection panels.
The smoke detector *MA05* 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 *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).
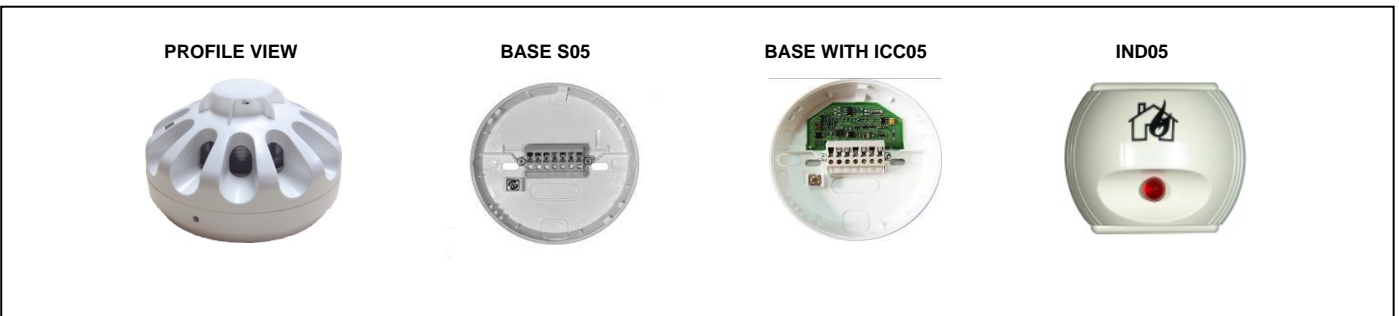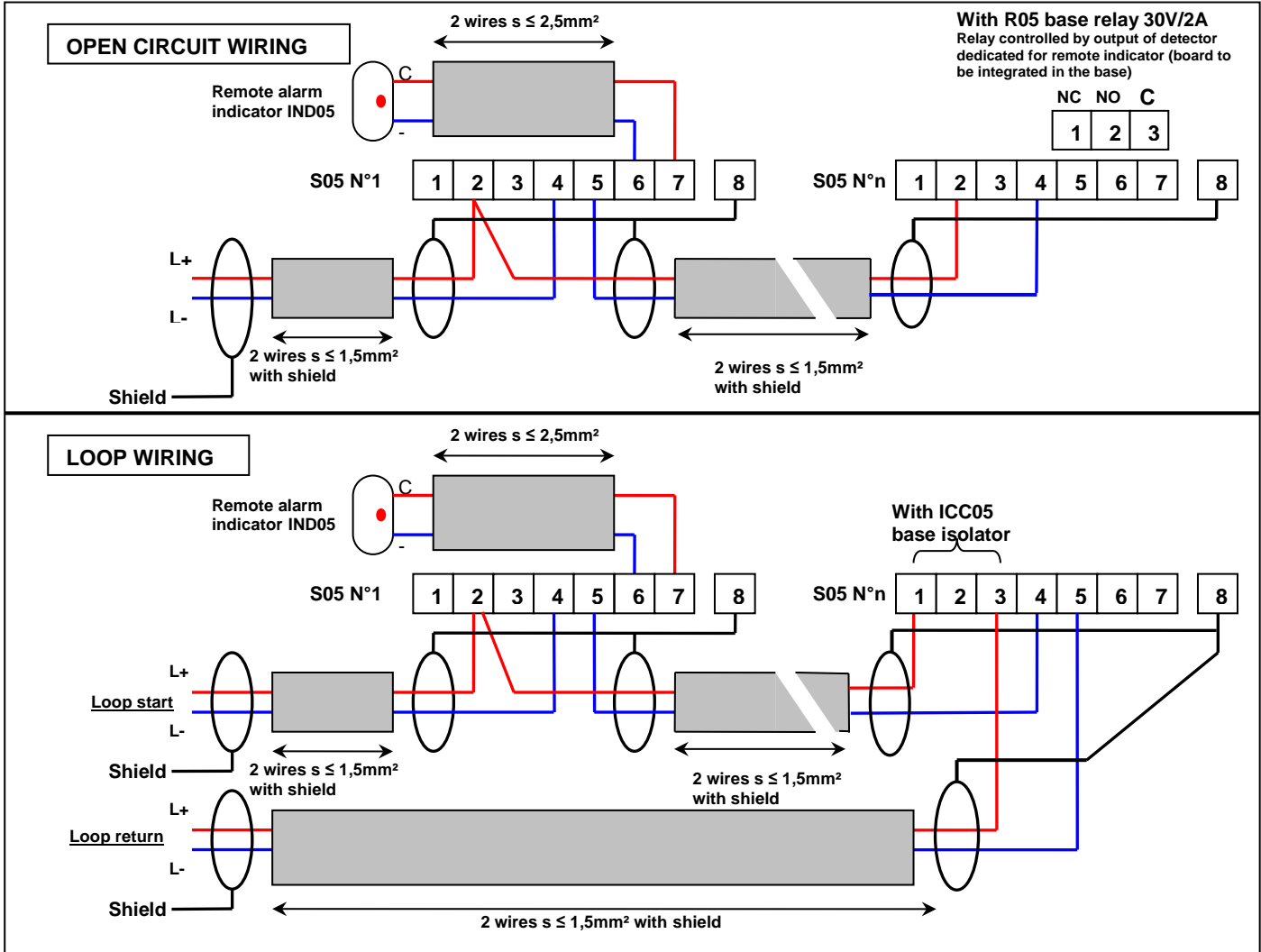
Main characteristics

- Photoelectric scattering (Tyndall effect)
- Optical element made sensitive by thermal element
- 1 remote alarm indicator output
- Lockable
- Standard EN54-7
- Cable section max 2,5mm²
- 8 levels sensitivity setting (0,1 dB/m to 0,35 dB/m)
- Base isolator (option)
- **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 without base isolator / 240µA with base isolator
Alarm current (24 Vdc)	5mA ± 1mA
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

OPEN CIRCUIT WIRING

2 wires s ≤ 2,5mm²

With R05 base relay 30V/2A
Relay controlled by output of detector dedicated for remote indicator (board to be integrated in the base)

Remote alarm indicator IND05

C
-

NC	NO	C
1	2	3

S05 N°1

1	2	3	4	5	6	7		8

S05 N°n

1	2	3	4	5	6	7		8

L+
L-

2 wires s ≤ 1,5mm² with shield

2 wires s ≤ 1,5mm² with shield

Shield

LOOP WIRING

2 wires s ≤ 2,5mm²

Remote alarm indicator IND05

C
-

With ICC05 base isolator

S05 N°1

1	2	3	4	5	6	7		8

S05 N°n

1	2	3	4	5	6	7	8

L+
Loop start
L-

Shield

2 wires s ≤ 1,5mm² with shield

2 wires s ≤ 1,5mm² with shield

L+
Loop return
L-

Shield

2 wires s ≤ 1,5mm² with shield

PROFILE VIEW   BASE S05   BASE WITH ICC05   IND05

REFERENCE	DESCRIPTION
MA05	Interactive optical/heat detector
S05	Base detector

ACCESSORIES	
IND05	Remote alarm indicator
IAA	Remote alarm indicator, for more than one detector
SOUND05	Base with internal sounder 95dB
ICC05	Base isolator
BRI	Universal base with gland holes for 05 detectors range
BRI/EM	Waterproof universal base with gland holes for 05 detectors range