



# MMD-509

## CO detection zone expansion module

### Description

The MMD-500 is a CO module for expanding the system. Each module allows connection of up to 32 detectors connected to 2 wires without polarity, with a maximum distance of 1 Km. The module has three programmable level relays, extraction 1 and extraction 2 and alarm.

Each module includes a display showing the CO concentration of the zones. Each of them can control the air renewal group manually or automatically. The automatic control lets you work in an advanced mode in which the overall system's power consumption is reduced. In order to obtain this reduction, the module performs algorithms to minimize the air renewal output activations by taking the individual measurement of each detector in the zone.

Each zone module lets you connect up to 32 DMD-500 or DMDP-500 carbon monoxide detectors. The connection to the module is done through 2 wires, the detectors may be distributed along 2,000 meters in length and each detector covers 200 m<sup>2</sup>; this value is defined as the maximum surface in current legislation.

### Features

- UNE 23300:1984 approved
- LOM 08MOGA3532 certificate
- Modular and expandable system
- 1, 2 and 3 zones per panel
- Concentration indication per zone
- 2 extraction relay outputs per zone
- 1 alarm relay output per zone
- Up to 32 detectors per zone
- Two-wire connection without polarity
- Operating mode for low power consumption
- Control option per speed regulator
- Multi-language keyboard

## Applications

Its main application is to activate ventilation systems in car parks or garages, either in a community of neighbors or in large areas.

If you breathe, even in moderate amounts, carbon monoxide can cause death from poisoning in a few minutes, as it substitutes to oxygen in the blood's hemoglobin.

The air renewal in those spaces where there is a high concentration of combustion vehicles is essential to detect the concentration of carbon monoxide in order not to have an intoxication with this gas.

## Technical features

### Expansion module

#### Zone module:

Measurement range:	From 0 to 300 ppm of CO
Measurement units:	ppm, in 3 digits
Module connections:	Removable terminal blocks Ø2,5 mm <sup>2</sup>
Zone connections:	2 wires
Maximum zone distance:	2 km 1,5 mm <sup>2</sup> wire
Maximum detectors per zone:	32 detectors
Extraction output level 1:	Relay (C, NC, NO)
Extraction output level 2:	Relay (C, NC, NO)
Alarm output:	Relay (C, NC, NO)
Extraction levels:	Selectable from 0 to 299 ppm
Alarm level:	Selectable from 0 to 299 ppm
Operating modes:	Automatic (maximum CO concentration) Automatic (average CO concentration) Manual extraction always off (OFF) Manual extraction always on (ON)