



# MAD-411

# MAD-411-I

# MAD-412

# MAD-412-I

Addressable modules 1 & 2  
relay outputs

## Description

The range of MAD-400 modules has been developed to offer a wide and complete range of input and output ports to be used with Detnov's addressable fire control panels.

The MAD-400 modules allow performances and manoeuvres for the proper functioning of the fire detection system, monitoring and/or acting according to the needs of the installation.

The MAD-400 modules have been designed to facilitate their installation process and they may be installed using screws or fitted into a DIN rail. Each module is equipped with removable terminal blocks and a LED status indicator. The addressing of the modules is carried out through the PGD-200 programmer or auto addressing for isolator version.

The MAD-411 and MAD-412 modules provide 1 or 2 voltage free relay outputs to the addressable fire detection system. To be used as a switch for a peripheral circuit. In the case of the module of 2 relay outputs, they act independently, being able to assign specific manoeuvres to each of the outputs.

The MAD-411 and MAD-412 modules take the power supply directly from the loop and assigned a number of loop addresses according to the number of inputs available in the module.

The MAD-411-I and MAD-412-I modules are equipped with integrated isolator.

All the range of MAD-400 modules can be installed inside the BOX-ONE and BOX-SIX boxes.

## Features

- Simple installation on the wall or fitted into a DIN rail
- Non-polarity supported (only MAD-401 and MAD-402)
- Addressing through a programmer
- Loop-powered device
- Connections through removable terminal blocks and simple fitting of the cable
- EN 54-18 and EN 54-17 approved

## Applications

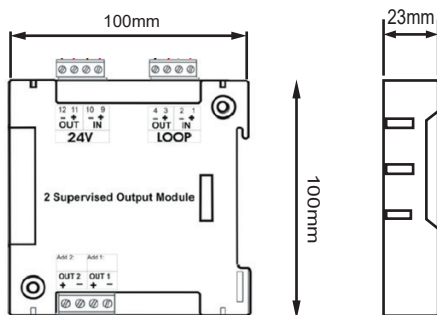
The MAD-411 and MAD-412 modules are ideal for switching any device on and off. They are also ideal for integration with other systems that can be managed through a relay contact, such as ventilation stoppage, elevator stoppage or discharge system activation.

## Technical features

Module	
Loop features:	
Operating voltage:	From 22 to 38VDC
Quiescent current consumption:	< 300 $\mu$ A
Alarm current consumption:	< 3 mA
Relay contact:	1 A @ 30VDC
Connections	
	2 x 1,5 mm <sup>2</sup> twisted and shielded cable (1)
Environment	
Operating temperature:	From -10°C to +70°C
Relative humidity:	95% without condensation
IP Index:	IP40
Technical features	
Size:	100 mm x 100 mm x 23 mm
Material:	ABS
Approvals	
	EN 54-18 and EN 54-17 (only MAD-411-I and MAD-412-I)
MAD-411, MAD-412 Certificate number:	0370-CPR-1181
MAD-411-I, MAD-412-I Certificate number:	0370-CPR-1863

(1) Use the "System Calculation" tool to check the maximum number of devices and loop length, in accordance with the cross-section of the cable used.

## Dimensions



\* Dimensions of MAD-432 module. The same size for all the range MAD-400.