Product Overview FSC-M240-MX

Fire & Smoke Control

Smart Matrix Controller M240-MX for fire safety and smoke extraction application with matrix set up. To control and monitor up to 240 motorized fire or smoke extraction dampers, 60 scenarios and up to 35 ventilators. Integration into a Building Automation System via BACnet IP; MS/TP and Modbus possible.

- **High flexibility: In case of alarm the M240-MX controls the dampers and ventilators in a ventilation plant via defined scenarios. Appropriate for the following applications:**
  - Fire Protection
  - Smoke Extraction
- **Simple handling:**
  - Project set up is done online independent from the controller
  - The applications are pre-programmed - no programming know-how needed
  - Configuration of the matrix is simple and intuitive. It is done online (Internet)
  - Uploading and adaptation of the matrix can be done anytime
- **Open communication:**
  - Digital via BACnet MS/TP (RS-485)
  - Remote/Cloud access available. Cloud access available free of charge
  - Integration into superior systems via BACnet IP (standard option)
- **Modular set-up:**
  - System expansion by adding additional I/O cards (IOM24-MX). Depending on the project requirements
  - Standard options for integration into Building Automation System if required
- **Additional features:**
  - Integrated real time clock allows automatic test runs with or without the activation of the ventilators
  - Alarm and alert messages by e-mail possible
  - Configuration of the matrix is done online, independently of the controller. Project adaptations possible anytime!

Technical Data

Operation Voltage	5V DC (power supply for 230V AC included in delivery)
Connections	Quick connection terminals
Communication	Internal: BACnet MS/TP (RS-485) External: BACnet IP (via Router MS/TP to IP), Modbus RTU (RS-485)
Baud Rates BACnet	9'600 to 76'800, auto detect
Configuration	Online platform, independently of the controller

For more details see Technical Data Sheet

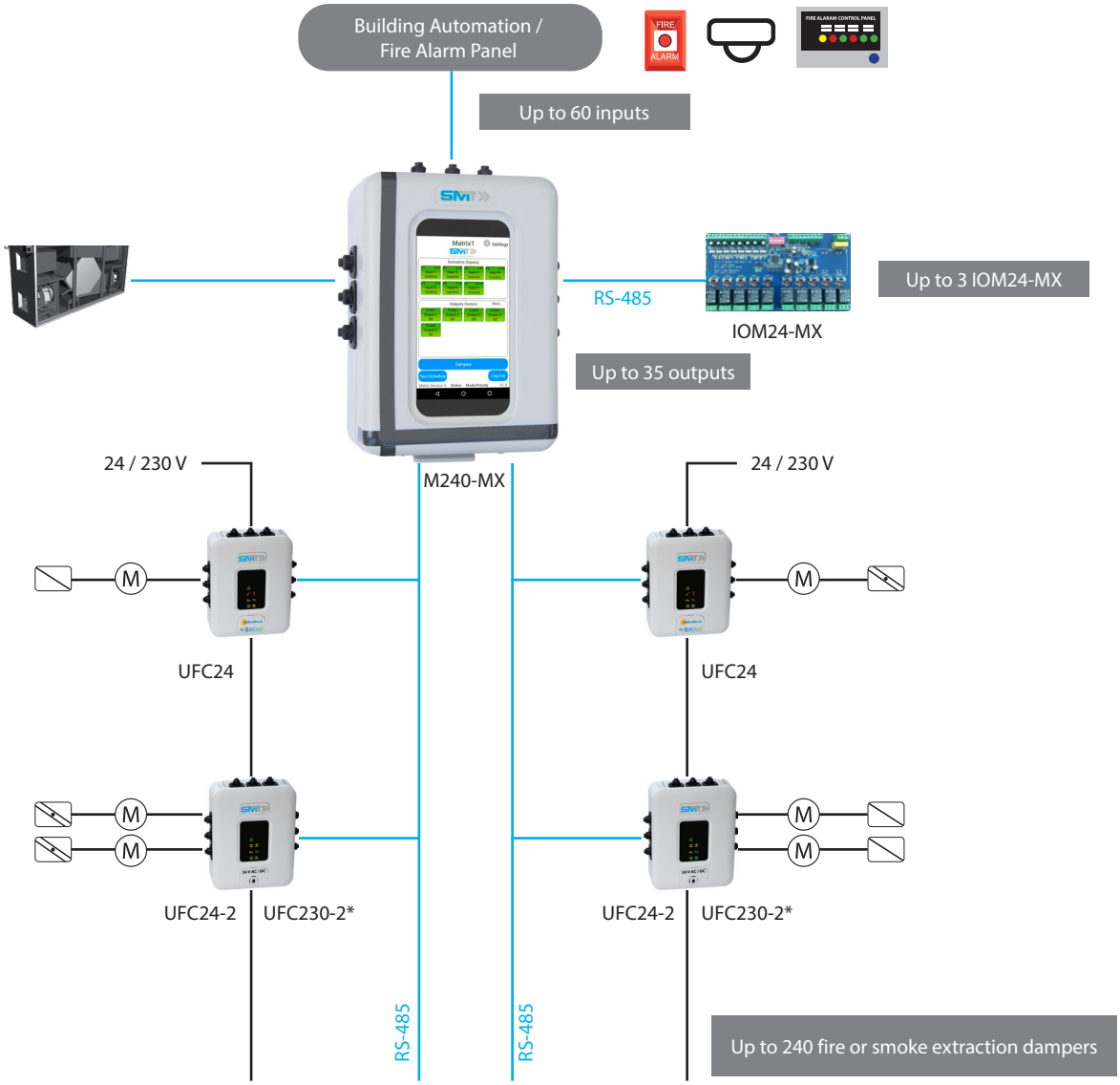
Fire & Smoke Control

Application
The M240-MX is a Smart Matrix Controller for fire safety and smoke extraction application. Integrated software for configuration of the matrix. It monitors and controls up to 240 fire and/or smoke extraction dampers and up to 35 ventilators. Up to 60 scenarios can be covered by the M240-MX. It is mounted in the control room or according to customer's need. Integrated real time clock, touch screen. The M240-MX can work stand-alone, via cloud access or can be implemented into any Building Automation System by BACnet IP; MS/TP or Modbus.

Additional Connections
Inputs
Integrated I/O Ports: 6 x DI
Expansion Modules: Up to 3 IOM24-MX with each 8 DI
Integrated DI in the UFC devices

Outputs
Modbus-Output for controlling of Modbus field modules
Integrated I/O Ports: 5 x DO
Expansion Modules: Up to 3 IOM24-MX with each10 DO

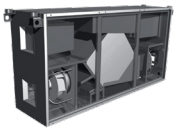
Universal Matrix System M240-MX



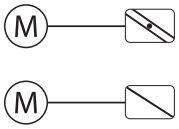
Summary:

- Up to 60 inputs / scenarios
- Up to 35 outputs (e.g. ventilators)
- Up to 240 fire or smoke extraction dampers
- 3 lines (lines 1 and 2: up to 60 UFC devices / line. Line 4: up to 3 IOM24-MX)
- Modular expansion of I/O's based on project size (via up to 3 IOM24-MX)
- Individual control of 2 dampers together with the UFC24-2 / UFC230-2
- UFC devices are available for the connection of 24 V and 230 V actuators (24 V: UFC24, UFC24-2, 230 V: UFC230-2)
- UFC24 and UFC24-2 for fire and smoke extraction dampers. *UFC230-2 for fire dampers only

Matrix Example



Outputs / Ventilators (up to 35)	Inputs / Scenarios (up to 60)									
	Idle (0)	1	2	3	4	5	.	.	.	60
1	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
2	Off	On	Off	Off	Off	Off	On	Off	Off	On
3	Off	Off	On	Off	Off	Off	On	Off	Off	Off
4	On	Off	On	Off	Off	Off	Off	Off	On	Off
5	Off	Off	Off	On	Off	Off	Off	Off	On	On
.	On	Off	Off	On	Off	Off	Off	On	On	On
.	On	On	Off	Off	On	Off	Off	On	On	Off
.	Off	Off	Off	Off	On	Off	Off	Off	Off	On
35	Off	On	Off	Off	Off	On	Off	Off	Off	On



Fire and Smoke Extraction Dampers (up to 240)																			
1	Open	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority	Closed	Priority
2	Open	Closed	Priority	Closed	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority	Open	Priority
3	Open	Open	Priority	Closed	Priority	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority
4	Closed	Open	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority
5	Open	Closed	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority
.	Closed	Closed	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority
.	Closed	Open	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority
.	Open	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority
240	Open	Open	Priority	Open	Priority	Open	Priority	Open	Priority	Closed	Priority	Open	Priority	Closed	Priority	Open	Priority	Open	Priority

Systems & Modules Technology AG
Bachtelstrasse 32
CH-8636 Wald
Switzerland
Phone: +41 55 241 10 20
Mail: info@smtec-ag.ch