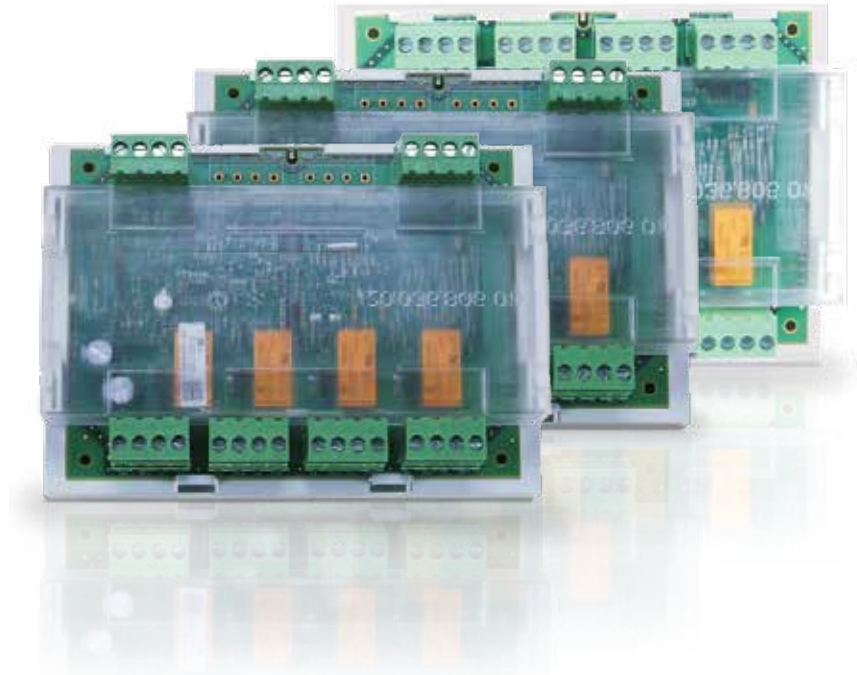# 850 Series
Generation 6 *MX* Quad Ancillary Modules

VIGILANT

Features

// Choice of 4 inputs and 4 relay outputs, 4 monitored outputs, 4 relay outputs

// Compact DIN rail mounting saves space

// Built-in loop short-circuit isolator

// Two-way IR communication with 850EMT saves commissioning time

Description

The *MX* Quad Ancillary Modules form a versatile new range of multiple input and output modules for use with *MX TECHNOLOGY* systems[1].

- **QIO850** - Quad Input / Output module – provides four monitored inputs and four relay outputs
- **QMO850** - Quad Monitored Output module – provides four monitored outputs
- **QRM850** - Quad Relay Output Module – provides four relay outputs

The modules are designed for compactness and ease of installation, and are ideal for applications such as:
- AS 1668 fan control interfaces,
- Plant or security outputs, or
- When large numbers of inputs and/or outputs are required.

Features common to the Quad Modules are:
- Built-in *MX* loop short-circuit isolator with fault indication at the *MX1* CIE[1] when operated
- IR link for programming by 850EMT
- Selectable interrupt operation to speed up response
- Enclosed in protective plastic housing, with an optional IP66 enclosure available for applications in challenging environments
- Top-hat DIN rail mounting
- LED indication of each output state

Specifications

	QIO850	QMO850	QRM850
MX Loop Voltage	20-40Vdc		
Quiescent Current	0.58mA	1.2mA	0.58mA
Alarm Current	3.6mA	4.2mA	3.6mA
Relay Output	2A@30Vdc	2A@30Vdc	2A@30Vdc
Aux. Voltage Input	20-55Vdc		
Input States	Short cct	-	-
	Alarm		
	Normal		
	Open cct		
Input EOL	3k3 Ohm	-	-
Dimensions (HWD)	134 x 103 x 49 mm		
Weight	232g		
Ambient Temp.	–25°C to +70°C		
Storage Temp.	–40°C to +80°C		
Relative Humidity	10% to 95% (n/cond.)		
ActivFire Listing	afp-2320		
FPANZ Listing	*pending*		

Part Numbers

	QIO850	QMO850	QRM850
Modules	555.800.071	555.800.070	555.800.073
IP66 Enclosure	557.201.410	557.201.410	557.201.410

1. The *MX* Quad Ancillary Modules are not supported by the MX4428 CIE.

- 24V/48V link selectable Auxillary supply for outputs
- Supervision of Auxillary supply for presence
- Fault indication of stuck relay contacts - not operating when switched on.

Wiring
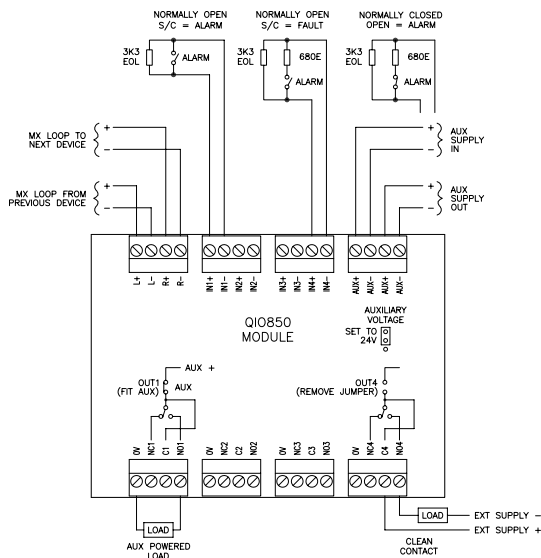## Quad 850 Modules - simplified wiring diagrams

FIG 1. QIO850 Quad Input/Output Module - Terminals

Notes:
1. Max. input cable resistance 50 Ohm.
2. AUX supply 24Vdc nominal to suit loads.
3. AUX supply fault 18Vdc +/-1V.

Output Options:
1. Clean contact - remove output jumper - use C, NO, NC relay as required.
2. Switched AUX O/P - fit output jumper to AUX position. Use NO for switched AUX+ output. Wire to load and back to 0V (AUX-).
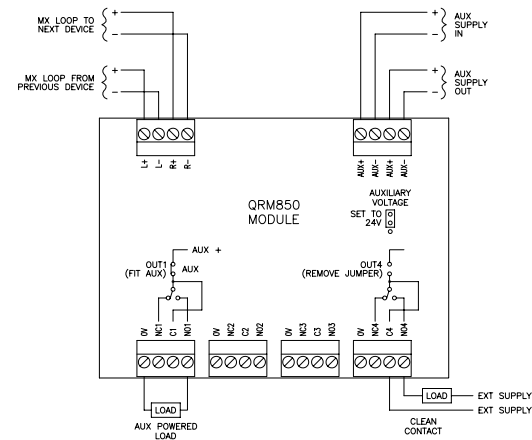

FIG 3. QRM850 Quad Monitored Output Module

Notes:
1. AUX supply 24Vdc nominal to suit loads.
2. AUX supply fault 18Vdc +/-1V.

Output Options:
1. Clean contact - remove output jumper - use C, NO, NC relay as required.
2. Switched AUX O/P - fit output jumper to AUX position. Use NO for switched AUX+ output. Wire to load and back to 0V (AUX-).
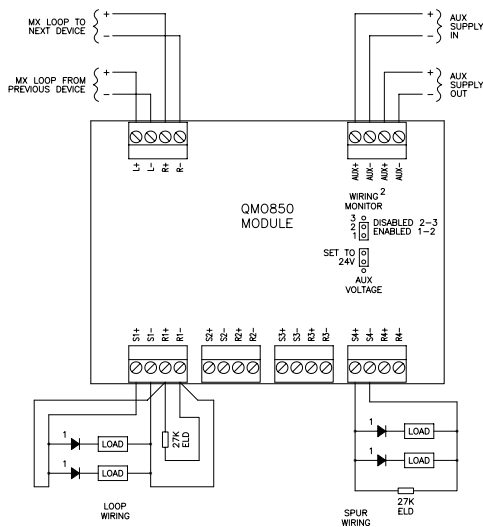

FIG 2. QMO850 Quad Monitored Output Module

Notes:
1. Load requires series diode if not fitted internally.
2. Fit wiring monitor jumper to enabled (1-2) to enable supervision of wiring resistance to AUX supply. Fit to disabled (2-3) to disable.
3. AUX supply 24Vdc nominal to suit loads.
4. AUX supply fault 18V +/-1V.

QIO850 Features:
- Four change over relay outputs and four monitored inputs each individually programmable for a wide range of applications
- Inputs can monitor normally open or normally closed clean contacts
- Inputs monitored for short/open circuit fault
- Interrupt generation on alarm programmable
- Relay contacts are monitored for "output stuck" conditions
- Outputs link selectable change-over relay contacts or switched AUX supply

QIO850 Applications:
- Damper control
- Sprinkler monitoring
- Interface to conventional panel
- Interface to medical gas panels / gas detection systems
- Interface to extinguishing systems / 3rd party detectors
- Local isolation input and control

QMO850 Features:
- Four polarity reversal outputs switching AUX supply
- Supervised for short and open faults
- Class A or Class B wiring for versatility

QMO850 Applications:
- Conventional sounder monitor and control
- AUX relay monitor and control
- Extinguishing system outputs

QRM850 Features:
- Four change over relay outputs each individually programmable for a wide range of applications
- Outputs link selectable change-over relay contacts or switched AUX supply
- The relay contacts are monitored for "output stuck" conditions

QRM850 Applications:
- A/C control
- Plant control
- Smoke control systems
- Lift control

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