Qxx850

Generation 6 MX Detection Range Quad Ancillary Modules

Features

• Compatible with MX Addressable Loop on VIGILANT MX1 panels
• 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

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

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

Specifications

<table>
<thead>
<tr>
<th></th>
<th>QIO850</th>
<th>QMO850</th>
<th>QRM850</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX Loop Voltage</td>
<td>20~40Vdc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiescent Current</td>
<td>0.58mA</td>
<td>1.2mA</td>
<td>0.58mA</td>
</tr>
<tr>
<td>Alarm Current</td>
<td>3.6mA</td>
<td>4.2mA</td>
<td>3.6mA</td>
</tr>
<tr>
<td>Relay Output</td>
<td>2A@30Vdc</td>
<td>2A@30Vdc</td>
<td>2A@30Vdc</td>
</tr>
<tr>
<td>Aux. Voltage Input</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input States</td>
<td>Short cct</td>
<td>Normal</td>
<td>Open cct</td>
</tr>
<tr>
<td>Input EOL</td>
<td>3k3 Ohm</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dimensions (HWD)</td>
<td>134 x 103 x 49 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>232g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temp.</td>
<td>-25°C to +70°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage Temp.</td>
<td>-40°C to +80°C</td>
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</tr>
<tr>
<td>Relative Humidity</td>
<td>10% to 95% (n/cond.)</td>
<td></td>
<td></td>
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ActivFire Listed

FPANZ Listed

Part Numbers

<table>
<thead>
<tr>
<th>Modules</th>
<th>QIO850</th>
<th>QMO850</th>
<th>QRM850</th>
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<tbody>
<tr>
<td>IP66 Enclosure</td>
<td>555.800.071</td>
<td>555.800.070</td>
<td>555.800.073</td>
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<td></td>
<td>557.201.410</td>
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1. The MX Quad Ancillary Modules are not supported by the MX4428 CIE.
Wiring
Quad 850 Modules – simplified wiring diagrams

FIG 1. QIO850 Quad Input/Output Module – Terminals
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 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. 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-).

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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VIGILANT, a respected regional brand of Johnson Controls, is a technology leader in the Australian and New Zealand fire detection markets with AS and NZS product approvals. The VIGILANT product line includes a comprehensive range of MX TECHNOLOGY fire detection products and the market-leading QEO80 voice evacuation systems. VIGILANT product is widely supported throughout Australia and New Zealand by a network of installation companies, service companies and distributors.

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