**MCP830 MX**  
Addressable IP67 Manual Call Point  
With built-in Short Circuit Isolator

**KEY FEATURES**

// IP67 Ingress Protection  
// Integral Short Circuit Isolator  
// Dual Colour LED Indication  
// EN54-1 Certification  
// Compact, Modern Styling  
// Test Key for Fast Testing

**DESCRIPTION**

The MCP830 Addressable surface mounting Manual Call Point has an International Protection rating of IP67, making it suitable for outdoor applications. It is designed to monitor and signal the condition of a switch contact that is operated by breaking a plastic coated frangible glass element (flexible plastic option available). Any change in the status of the switch is immediately communicated to the Tyco MX Control and Indicating Equipment (CIE).

The MCP830 has an integral short-circuit isolator for monitoring the addressable loop wiring. The integral LED indicator is normally off. When the frangible element is broken, an alarm is registered and the LED will illuminate red. If a section of the loop wiring adjacent to the MCP830 is shorted, the built-in short-circuit isolator trips, isolating the shorted section and the LED is illuminated yellow. The status remains until the short is removed.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loop Voltage</td>
<td>20V to 40Vdc</td>
</tr>
<tr>
<td>Quiescent Current</td>
<td>280µA</td>
</tr>
<tr>
<td>Alarm State Current</td>
<td>2.8mA</td>
</tr>
<tr>
<td>Max. MCP830 / Loop</td>
<td>200/250</td>
</tr>
<tr>
<td>Environment</td>
<td>Outdoor Application</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>–25°C to +70°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>–30°C to +70°C</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>10% to 95% (non cond.)</td>
</tr>
<tr>
<td>Ingress Protection</td>
<td>IP67</td>
</tr>
<tr>
<td>Dimensions (HWD)</td>
<td>93 x 98 x 73mm</td>
</tr>
<tr>
<td>ActivFire Listing</td>
<td>afp-2875 (EN 54-11:2001)</td>
</tr>
</tbody>
</table>

**Part Numbers**

- 514.800.612 Manual Call Point
- 515.001.025 Frangible Glass Element (packet of 5)
- 515.001.127 Flexible Plastic Element
- SC070 Test Key (packet of 10)
- SU0615 Transparent Hinged Cover

**Notes**

1. Addressable loop voltage provided by MX CIE.
2. MX4426/MX1, 4100MXP. Refer to LT0273 (MXP), LT0313 (4100MXP), LT0368 (MX1-NZ), LT0441 (MX1-Au) for design specifications.
3. Note the MCP830 does not have a formal UV exposure rating. Installation in full sun should be avoided.
MCP830 WIRING DETAILS - REAR VIEW

The MCP830 has a factory set (invalid) address of 255. The MCP830 is field programmed with the address prior to installation using an MX address programming tool. The associated ancillary programming lead plugs into the programming port. Ensure that the pins of the ancillary programming lead are inserted completely into the lower row of the programming port for effective communication with the address programming tool.

1. Ancillary programming port
2. Ancillary programming lead
3. Connected to Loop + IN
4. Connected to Loop - IN
5. Connected to Loop + OUT
6. Connected to Loop - OUT
7. Gasket

INSTALLATION

Ensure the cable entry holes are in the vertical plane, with either the single or double entry holes at the top. Mount the MCP830 back box to a suitably flat surface in the required location using the three fixing holes and screws provided.

Two hole stoppers with plastic washers are provided for use where cable glands are not required. Ensure that all cable entry holes are securely sealed. The recommended sealant is Loctite 5331. Ensure that the gasket is correctly seated in its channel on the rear of the cover.

An Earth Continuity Terminal is situated in the rear of the back box. An earthing plate is provided for continuity of metal conduits. The body of the MCP is fixed to the back box with four fixing screws supplied.

TESTING

A test key is provided with each MCP allowing easy testing, without breaking the frangible element. The key is inserted into a slot in the base of the MCP, allowing the frangible element to drop away from the switch; activating it and registering an alarm at the CIE.