MX31 Series
MANUAL, AUTO RESET or MODIFIED CIRCUIT PROTECTOR

MX31 Series are ruggedly designed automatic and manual reset circuit protectors for demanding applications within the automotive, marine and lawn-and-garden industries, to name just a few.

The MX31 is a low-voltage breaker which operates on the "snap-action" bi-metallic element principle. When an overload reaches the calibrated trip point of the bi-metal element, the contacts snap open, disconnecting the load.

The reset button on the manual version pops out, thus providing a visual trip indication, and the circuit remains disconnected until manually reset.

The auto reset version resets itself without visual indication.

Multiple mounting options are available, offering a wide range of applications.

### SPECIFICATIONS

- **Trip Time vs. Overload at 25°C**
  - At 100% of rated current: no trip
  - At 135% of rated current: trip within 1 hour
  - At 200% of rated current: trip within 5 to 35 seconds
- **Current and Voltage Ratings**
  - 5A–50 A, 12VDC/24VDC
- **Interrupt Capacity**
  - 5A–10A / 24VDC, 100A
  - 11A–15A / 24VDC, 150A
  - 16A–20A / 24VDC, 200A
  - 21A–30A / 24VDC, 300A
  - 31A–40A / 24VDC, 400A
  - 41A–50A / 24VDC, 500A
- **Resettable Overload Capacity**
  - 10 times rated current
- **Dielectric Strength**
  - 1800VAC / 1 minute
- **Insulation Resistance**
  - > 100MΩ
- **Reference Documents**
  - SAE Standard J553 (Type I II III)
- **Operating Temperature**
  - -23°C to 65°C
- **Storage Temperature**
  - -29°C to 93°C

### TRIP TIME CURVE
DIMENSIONS in mm

1. Two 10-32 Studs; .66 (aux); .56 (bat)
2. One .250 QC (aux); One 10-32 Stud (bat)
3. Double .250 QC (aux); One 10-32 Stud (bat)
4. Two .250 QC; (aux & bat)
5. Two Double .250 QC (aux & bat)
6. Double .250 QC (aux); Single .250 QC (bat)
7. Two .187 QC (aux & bat)
8. Two 10-32 Studs; .66 (aux); .56 (bat)

TERMINAL OPTIONS

1. Two 10-32 Studs; .66 (aux); .56 (bat)
2. One .250 QC (aux); One 10-32 Stud (bat)
3. Double .250 QC (aux); One 10-32 Stud (bat)
4. Two .250 QC; (aux & bat)
5. Two Double .250 QC (aux & bat)
6. Double .250 QC (aux); Single .250 QC (bat)
7. Two .187 QC (aux & bat)
8. Two 10-32 Studs; .66 (aux); .56 (bat)

BRACKET OPTIONS

Metal brackets shown. Consult factory for plastic bracket dimensions.

No Bracket
01 Bracket
02 Bracket
03 Bracket
04 Bracket

OPTIONS SELECTION

<table>
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<tr>
<th>Series</th>
<th>Amps select by number</th>
<th>Volts select by letter</th>
<th>Terminals select by number</th>
<th>Actuator select by letter</th>
<th>Mounting select by letter</th>
<th>Base Material select by letter</th>
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<tbody>
<tr>
<td>MX31</td>
<td>050 5A : 100 10A : 150 15A : 200 20A : 500 50A</td>
<td>A 12/24VDC</td>
<td>1 Two #10-32 Studs (copper/zinc)</td>
<td>A Automatic Reset Type I</td>
<td>0 No Bracket</td>
<td>A Metal</td>
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<td></td>
<td></td>
<td></td>
<td>2 One .250 QC / One #10-32 Stud</td>
<td>B Manual Reset Type III</td>
<td>1 01 Bracket</td>
<td>B Plastic</td>
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<tr>
<td>Manual or</td>
<td></td>
<td></td>
<td>3 Double .250 QC / One #10-32 Stud</td>
<td>C Modified Type II</td>
<td>2 02 Bracket</td>
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<tr>
<td>Auto Reset</td>
<td></td>
<td></td>
<td>4 Two .250 QC</td>
<td></td>
<td>3 03 Bracket</td>
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<tr>
<td>or Modified</td>
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<td></td>
<td>5 Two Double .250 QC</td>
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<td>4 04 Bracket</td>
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<tr>
<td>Circuit</td>
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<td></td>
<td>6 Double .250 QC / Single .250 QC</td>
<td></td>
<td>5 Tie Wrap</td>
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<tr>
<td>Protectors</td>
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<td>7 Two .187 QC</td>
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<td>6 Special</td>
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<td></td>
<td></td>
<td></td>
<td>8 Two #10-32 Zinc Studs</td>
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<td>9 Two #10-32 Same Length .56”</td>
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</tbody>
</table>

Example: MX31 150 A 5 B 0 B
MX31, 15Amps, 12/24VoltsDC, Two double .250 QC terminals, Manual reset, No bracket, Plastic base

TRIMAX Circuit Protectors
A DIVISION OF PELCO COMPONENT TECHNOLOGIES
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