### **MX31 Series**

### MANUAL or AUTO RESET 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-acting" bimetallic element principle.

When an overload reaches the calibrated trip point of the bi-metal element, the contacts snap open, disconnecting the load. When the bi-metal strip cools, the breaker can then be reset.

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



### **EXAMPLES OF MX31 SERIES APPLICATIONS include:**

- Battery Chargers
- Buses
- Boats and Marine Equipment
- Road and Construction Equipment
- Fire and Emergency Equipment
- Lawn and Garden Equipment
- Recreational Vehicles
- Trolling Motors
- Trucks
- ...and many more

# **SPECIFICATIONS**

## ■ Calibration at 25°C

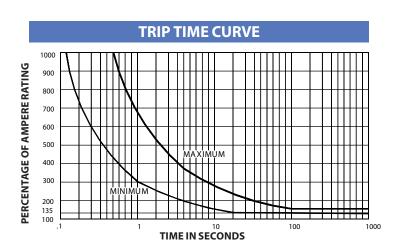
Will continuously carry 100% of rated load. Will trip in less than one hour at 135% of rated load and within 5 to 35 seconds at 200% of rated load.

- Current and Voltage Ratings 5 to 50 A, 250VAC.
- 5 to 50 A, 12VDC/24VDC.

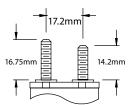
  Interrupt Capacity
- 1000 A.

  Resettable Overload Capacity
- 10 times rated current.
- Dielectric Strength 1800VAC / 1 minute.
- Contact Endurance Cycles 6 times rated current fo 30 minutes.

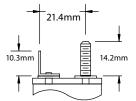
- Insulation Resistance Not less than  $100M\Omega$ .
- Reference Documents SAE Standard J553 (Type I III).
- Operating Temperature -23°C to 65°C.
- Storage Temperature -29°C to +93°C.



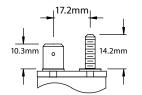
## **DIMENSIONS** in mm



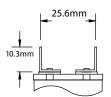
1 Two 10-32 Studs; .66 (aux); .56 (bat)



2 One .250 QC (aux); One 10-32 Stud (bat)

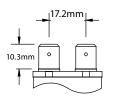


**3** Double .250 QC (aux); One 10-32 Stud (bat)

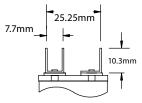


Two .250 QC; (aux & bat)

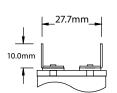
### **TERMINAL OPTIONS**



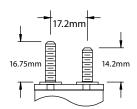
5 Two Double .250 QC (aux & bat)



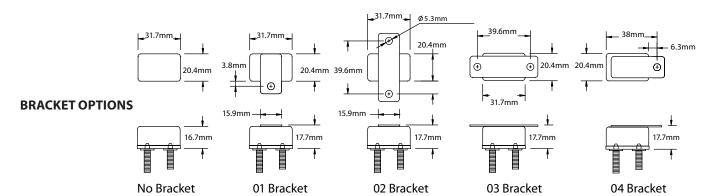
**6** Double .250 QC (aux); Single .250 QC (bat)



**7** Two .187 QC (aux & bat)



8 Two 10-32 Studs; .66 (aux); .56 (bat)



### **OPTIONS SELECTION**

Series	Amps select by number	<b>Volts</b> select by letter	<b>Terminals</b> select by number	Actuator select by letter	Mounting Hardware select by number
MX31  Manual or Auto Reset Circuit Protectors	050 5A 100 10A 150 15A 200 20A 500 50A	A 12/24VDC/250VAC	<ol> <li>Two 10/32 Studs (copper/zinc)</li> <li>One .250 QC / One 10/32 Stud</li> <li>Double .250 QC / One 10/32 Stud</li> <li>Two .250 QC</li> <li>Two Double .250 QC</li> <li>Double .250 QC / Single .250 QC</li> <li>Two .187 QC</li> <li>Two 10/32 Zinc Studs</li> </ol>	A Automatic Reset B Manual Reset	<ul> <li>No Bracket</li> <li>1 01 Bracket</li> <li>2 02 Bracket</li> <li>3 03 Bracket</li> <li>4 04 Bracket</li> <li>5 Tie Wrap</li> <li>6 Special</li> <li>Base Material select by letter</li> </ul>
Example: MX31   150   A   5   B   0   B					A Metal



MX31, 15Amps, 12/24VoltsDC/250VoltsAC,

Two double .250 QC terminals, Manual reset, No bracket, Plastic

**B** Plastic