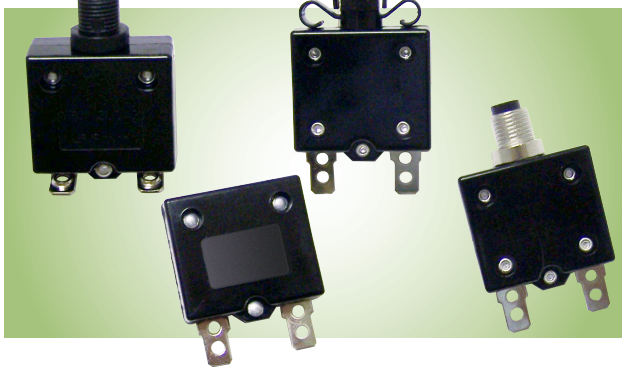


## MX12 Series MANUAL or AUTO RESET CIRCUIT PROTECTOR



MX12 Series Circuit Protectors have been designed to protect against overloads and short-circuits for almost any conceivable application requiring dependability and economy.

The MX12 Series employs a proven “snap-action” bi-metal element to sense overload. When an overload reaches the calibrated trip point of the bi-metal element, the contact snaps open, disconnecting the load.

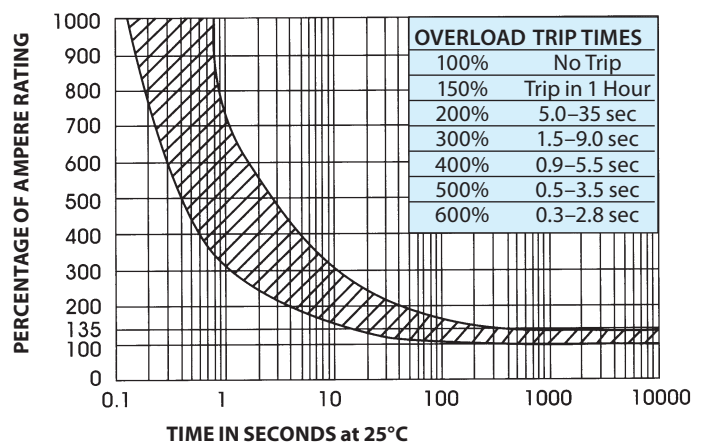
The reset button on the manual version pops out, thus providing a visual trip indication, and the circuit remains disconnected until manually reset.

The auto reset version resets itself without visual indication.

### EXAMPLES OF MX12 SERIES APPLICATIONS include:

- Audio Systems
  - Control Panels
  - HVAC Equipment
  - Motor Protection
  - Power Supplies
  - Vending Machines
  - Personal Transportation Devices
- ...and many more.

### TRIP TIME CURVE



### SPECIFICATIONS

- **Trip Time vs. Overload at 25°C**  
At 100% of rated current: no trip  
At 150% of rated current: trip within one hour  
At 200% of rated current: trip within 5 to 35 seconds
- **Current and Voltage Ratings**  
3A–40A, 125/250VAC / 32VDC  
50A–80A available upon request without UL
- **Interrupt Capacity**  
1000A at 125VAC, 200A at 250VAC
- **Resettable Overload Capacity**  
6 times rated current
- **Dielectric Strength**  
1500VAC / 1 minute
- **Voltage Drop**  
< 0.25V
- **Temperature Rise at Terminal Block**  
< 65°C with 100% of rated current applied continuously at 25°C
- **Maximum Reset Time**  
60 seconds
- **RoHS compliant**

- **Insulation Resistance**  
> 500Mohms
- **Termination Options**  
.250" QC tabs available in straight, 90° or 45° bend.  
#8-32 screw and lockwasher assembly.  
Contact Trimax for non-standard termination options.
- **Approvals**  
Manual Reset: UL/cUL 3A-30A, 125/250VAC / 32VDC  
VDE 3A-16A

### DERATING FACTORS for AMBIENT TEMPERATURE

60°C	x 1.75
50°C	x 1.43
40°C	x 1.22
32°C	x 1.10
25°C	x 1.00
18°C	x 0.90
15°C	x 0.88
10°C	x 0.74
0°C	x 0.68

**OPTIONS ILLUSTRATED / DIMENSIONS in mm**

<b>TERMINAL OPTIONS</b>						
	.250 Tab Straight	.250 Tab 45° Bend	.250 Tab 90° Bend	.250 Tab 90° Bend Backwards	#8-32 Screws and Lockwasher	

<b>PANEL CUTOUTS</b>												
	11.2 <sup>+0.2</sup> <sub>0</sub> 10 <sup>+0.2</sup> <sub>0</sub>		9.5 <sup>+0.2</sup> <sub>0</sub> 8.5 <sup>+0.1</sup> <sub>0.05</sub>		11 <sup>+0.2</sup> <sub>0</sub> 12.2 <sup>+0.2</sup> <sub>0</sub>		13.8 ± 0.13 16 ± 0.13		13.8 <sup>+0</sup> <sub>-0.2</sub> 15.8 <sup>+0.2</sup> <sub>0</sub>			
<b>BUSHING OPTIONS</b>												
	9.8 4.0 12.6 M11X1.0 A Type		9.8 1.2 12.6 M11X1.0 B Type		9.5 1.5 13.0 3/8"-27 C Type		10.8 4.0 12.6 M12X1.0 D Type		Snap In I		Snap In II	

<b>MOUNTING HARDWARE OPTIONS</b>			
	Knurlnut	Hexnut	Integrated Knurlnut

<b>MOUNTING ACCESSORY OPTIONS</b>		
	Silver Printing on Black	Waterproof Cover

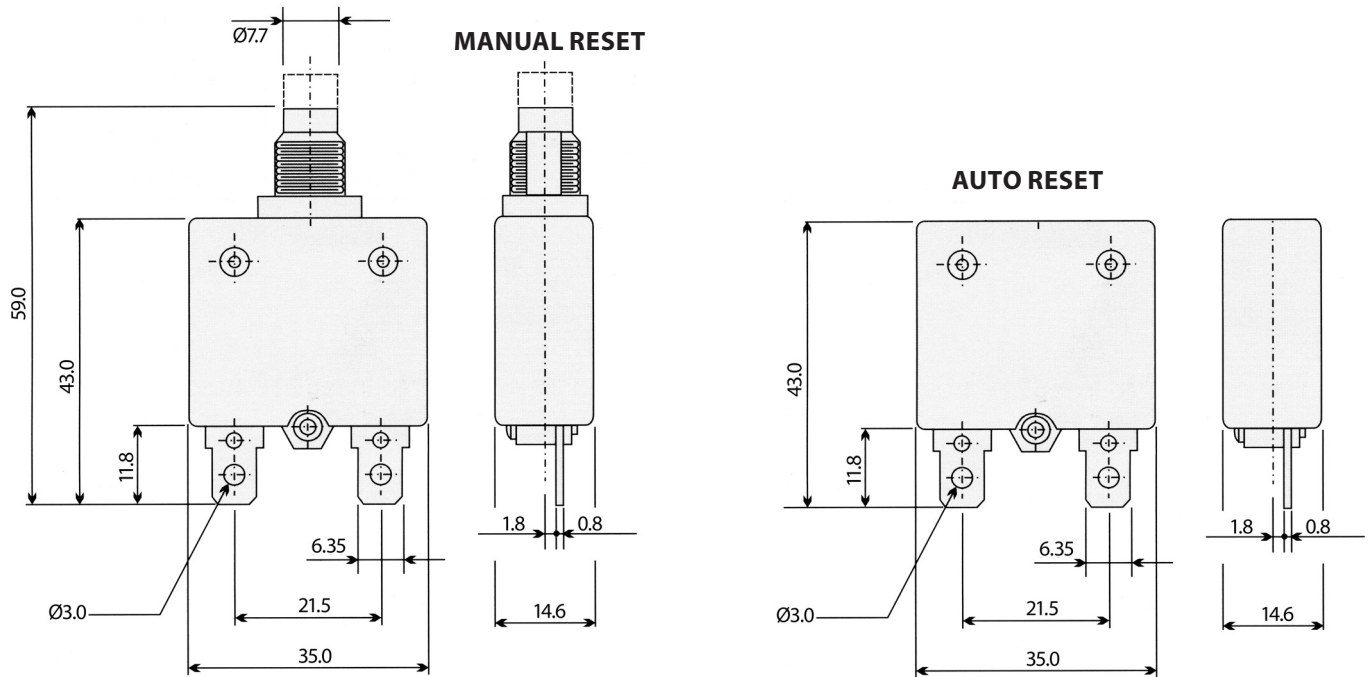
All hardware items are available for M11, M12 and 3/8"bushing options.

# MX12 Series

## MANUAL or AUTO RESET CIRCUIT PROTECTOR

020416

### DIMENSIONS in mm



### OPTIONS SELECTION

Series	Amps select by number	Volts select by letter	Terminals select by number	Actuator select by letter	Bushing select by number
<b>MX12</b>	<b>030</b> 3A	<b>A</b> 125/250VAC / 32VDC	<b>1</b> .250 Tab Straight	<b>A</b> Black Button <b>B</b> Black w/Vertical White Print <b>C</b> Black w/Horizontal White Print <b>D</b> White Button <b>E</b> White w/Vertical Black Print <b>F</b> White w/Horizontal Black Print <b>G</b> White w/Vertical Red Print <b>H</b> Red Button <b>J</b> Red w/Vertical Black Print <b>K</b> Auto Reset	<b>1</b> A Type Metal <b>2</b> A Type Plastic <b>3</b> B Type Metal <b>4</b> B Type Plastic <b>5</b> C Type Plastic <b>6</b> D Type <b>7</b> Snap In I Plastic <b>8</b> Snap in II Plastic <b>9</b> None
Manual or Auto Reset Circuit Protectors	<b>050</b> 5A		<b>2</b> .250 Tab Bend 45°		
	<b>100</b> 10A		<b>3</b> .250 Tab Bend 90°		
	<b>150</b> 15A		<b>4</b> .250 Tab Bend 90° Backward		
	<b>200</b> 20A		<b>5</b> Straight #8-32 Screw Terminal		
	<b>500</b> 50A		<b>6</b> #8-32 Screw Terminal w/Bend 90°		
			<b>7</b> One .250 Tab Straight and One Straight #8-32 Screw Terminal w/Bend 90°		

To ensure accuracy when specifying options, please follow selection order:

Series  
Amps  
Volts  
Terminals  
Actuator  
Bushing  
Mounting Hardware  
Mounting Accessories  
Base Color

Mounting Hardware select by letter	Mounting Accessories select by number	Base Color select by letter
<b>A</b> None <b>B</b> Metal Knurlnut <b>C</b> Metal Hexnut <b>D</b> Plastic Integrated Knurlnut <b>E</b> Metal Hex and Knurlnut <b>F</b> (2) Metal Hex Nuts	<b>1</b> None <b>2</b> Nameplate <b>3</b> Rubber Boot <b>4</b> Rubber Boot with Nameplate <b>5</b> Bracket Attachment	<b>B</b> Black

Example: **MX12 100 A 5 D 1 A 3 B** MX12, 10Amps, 125/250VoltsAC / 32VoltsDC, Straight #8-32 screw terminals, White button actuator, A Type metal bushing, No mounting hardware, Rubber boot, Black base