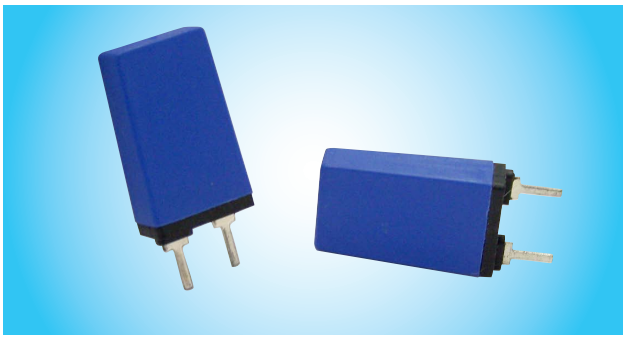
MX35 Series

AUTO RESET CIRCUIT PROTECTOR, MINIATURE

TRIMAX Circuit Protectors



EXAMPLES OF MX35 SERIES APPLICATIONS include:

- Battery Chargers
- Business Machines
- Medical Equipment
- Power Supplies
- Data Processing Equipment
- Residential Appliances
- Telecom Equipment

…and many more

MX35 Series Miniature Thermal Circuit Protector is an automatic reset current-sensing device. Among the smallest in the industry, it offers an economical solution where space and reliable performance are prime considerations.

It mounts directly on the printed circuit board, and is available in many popular rating points ranging from 0.3 to 12 amps.

The MX35 employs a bi-metallic, "snap-action" sensing element, sensitive to load current as well as ambient temperature.

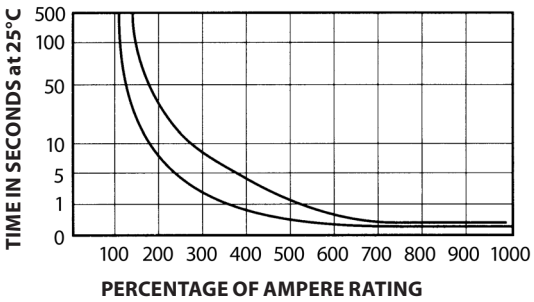
When subject to overload current, the temperature rise in the bi-metal element causes the contacts to snap open. Upon a decrease in temperature the bi-metal automatically snap-closes the contacts.

If the load current is still excessive upon closure, the temperature of the bi-metal element will again rise and repeat the trip cycle.

SPECIFICATIONS

- **Current and Voltage Ratings**
  0.3A–12A, 250VAC, 50/60 Hz
  0.3A–12A, 24VDC
- **Interrupt Capacity**
  See chart next page
- **Dielectric Strength**
  1500VAC / 1 minute
- **Trip Time vs. Overload at 25°C**
  At 100% of rated current: no trip
  At 135% of rated current: trip within 1 hour
  At 300% of rated current: trip within 10 seconds
- **Resettable Overload Capacity**
  3 times rated current for protectors rated at 0.8A or less
  5 times rated current for protectors rated at 1.0A or more
- **Voltage Drop**
  < 0.5% of applied voltage
- **Reset Time**
  Approximately 10 seconds
- **Insulation Resistance**
  > 100MΩ at 500VDC
- **Temperature Rise at Terminal Block**
  < 55°C at 100% of rated current applied continuously
- **Soldering Temperature**
  260°C for 10 seconds
- **Termination**
  Printed circuit board pins
- **Weight**
  2.6 grams

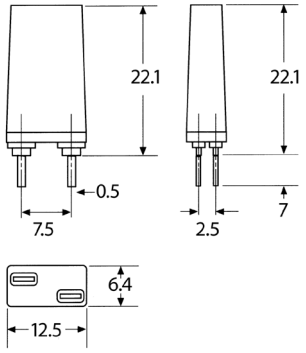
TRIP TIME CURVE



DERATING FACTORS for AMBIENT TEMPERATURE

Temperature	Current Rating 1A–5A
55°C	x 1.43
45°C	x 1.25
35°C	x 1.11
25°C	x 1.00
20°C	x 0.93
15°C	x 0.86
10°C	x 0.81

DIMENSIONS in mm



MAXIMUM RESISTANCE and INTERRUPT CURRENT vs. CURRENT RATING at 25° C

Rated Hold (Amps)	Max. (Volts AC)	Trip Time 200% Overload Current within 30 Sec	Trip Time 300% Overload Current within 5 Sec	Internal Resistance (Ohms) under	Maximum Interrupt Current (Amps)
0.3	250	30 Sec	5 Sec	0.75	4
0.4	250	30 Sec	5 Sec	0.75	4
0.5	250	30 Sec	5 Sec	0.6	6
0.6	250	30 Sec	5 Sec	0.6	6
0.7	250	30 Sec	5 Sec	0.5	10
0.85	250	30 Sec	5 Sec	0.5	10
1.0	250	30 Sec	5 Sec	0.15	20
1.25	250	30 Sec	5 Sec	0.15	20
1.4	250	30 Sec	5 Sec	0.15	20
1.5	250	30 Sec	5 Sec	0.12	30
1.6	250	30 Sec	5 Sec	0.12	30
1.75	250	30 Sec	5 Sec	0.12	30
1.9	250	30 Sec	5 Sec	0.12	30
2.0	250	30 Sec	5 Sec	0.1	30
2.2	250	30 Sec	5 Sec	0.1	30
2.5	250	30 Sec	5 Sec	0.08	30
2.7	250	30 Sec	5 Sec	0.08	30
3.0	250	30 Sec	5 Sec	0.06	30
4.0	250	30 Sec	5 Sec	0.06	40
5.0	250	30 Sec	5 Sec	0.04	50
6.0	250	30 Sec	5 Sec	0.04	60
7.0	250	30 Sec	5 Sec	0.04	70
8.0	250	30 Sec	5 Sec	0.04	80
9.0	250	30 Sec	5 Sec	0.04	90
10.0	250	30 Sec	5 Sec	0.03	100
12.0	250	30 Sec	5 Sec	0.03	120

OPTIONS SELECTION

Series	Amps select by number	Volts select by letter
MX35 Auto Reset Miniature Thermal Circuit Protectors	**003** 0.3A **005** 0.5A **050** 5A **080** 8A **100** 10A **120** 12A	**A** 250VAC / 24VDC

Example: **MX35** | **005** | **A**

MX35, 0.5Amp, 250VoltsAC / 24VoltsDC

TRIMAX Circuit Protectors
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