MX35 Series AUTO RESET CIRCUIT PROTECTOR, MINIATURE



PELCO COMPONENT TECHNOLOGIES • 855 227 3526



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.

EXAMPLES OF MX35 SERIES APPLICATIONS include:

- Battery Chargers
- Business Machines
- Medical Equipment Power Supplies
- Data Processing Equipment
- Residential Appliances
- Telecom Equipment
- ...and many more

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

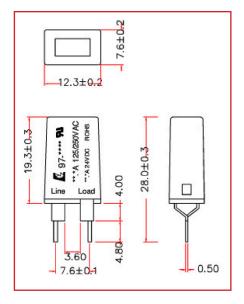
- Reset Time Approximately 10 seconds
- Insulation Resistance $> 100M\Omega$ at 500VDC
- Temperature Rise at Terminal Block < 55°C at 100% of rated current applied continuously
- Soldering Temperature 260°C for 10 seconds
- Termination Printed circuit board pins
- Weight 2.6 grams

TRIP TIME CURVE							
TIME IN SECONDS at 25°C 00 10 00 10 00 10 00 10 00 10 00 10 00 10 1							
100 200 300 400 500 600 700 800 900 1000 PERCENTAGE OF AMPERE RATING							

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	Max.	Trip Time		Internal	Maximum
Hold	(Volts	200%	300%	Resistance	Interrupt
(Amps)	AC)	Overload Current		(Ohms)	Current
		within 30 Sec 5 Sec		under	(Amps)
		30 Sec	5 Sec	under	
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	003 0.3A 005 0.5A	A 250VAC / 24VDC	
Auto Reset Miniature Thermal Circuit Protectors	050 5A 080 8A 100 10A 120 12A		

Example: MX35 005 A

MX35, 0.5Amp, 250VoltsAC / 24VoltsDC

