

## M1 Series Rocker-Actuated, Trip-Free Thermal Circuit Breaker/ Power Switch With Option Indicator Lamp Multiple Patent

### Features

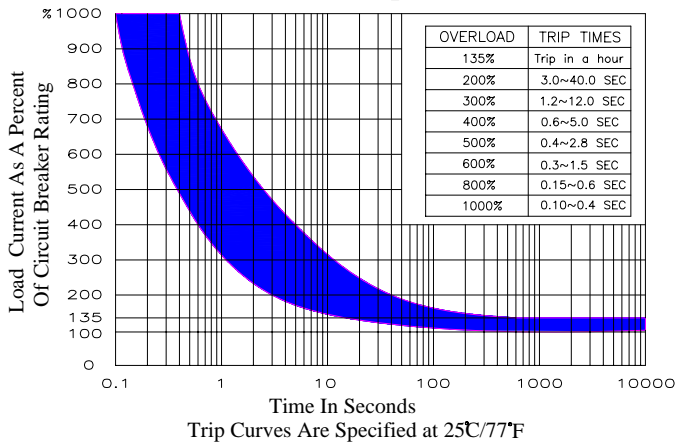
- Compact, trip-free, rocker-actuated design.
- 5 to 20 amp ratings.
- Provides circuit protection and power switching in a single unit.
- Available with optional indicator lamp.
- Snaps into the same cutout as many common power switches.
- Various color, marking and termination options.

### Technical data

Rated voltage	AC 125/250V DC 50V
Rated current	5-20 A
Interrupt Capacity	1000A 250V (UL1077)
Dielectric strength	AC 1500V (1min)
Insulation resistance	≥ 100 MΩ, 500VDC
Resettable Overload Capacity	Ten times rated current
Switch Endurance Cycling	Over 6,000 operations at rating current
Weight:	Approx 10.5g

### Time vs. Current Trip Curve@+25°C

#### 5~20A Trip Curves



### Ambient Compensation Table

Ambient Temperature In °C	Rating Correction Factor	
	5-6A Models	7-20A Models
10	.80	.80
20	.90	.90
25	1.00	1.00
30	1.10	1.05
40	1.25	1.15
50	1.61	1.25
60	2.15	1.40

The unit is calibrated for an ambient temperature of +25°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor to the left.

### Approval

Approval & File No.	Rated current range	Rated voltage
ULCUL E95802	5-20 A	125/250VAC 50VDC
CCC 2003010307097858	5-20 A	125/250VAC
VDE 40015302	5-20 A	250VAC

### Typical Resistance vs. Current Rating @ +25°C

Current Rating in Amps	Typical Resistance in Ohms	Current Rating in Amps	Typical Resistance in Ohms
5.0	0.05	13.0	0.020
7.0	0.036	15.0	0.017
10.0	0.025	20.0	0.0125
12.0	0.022		

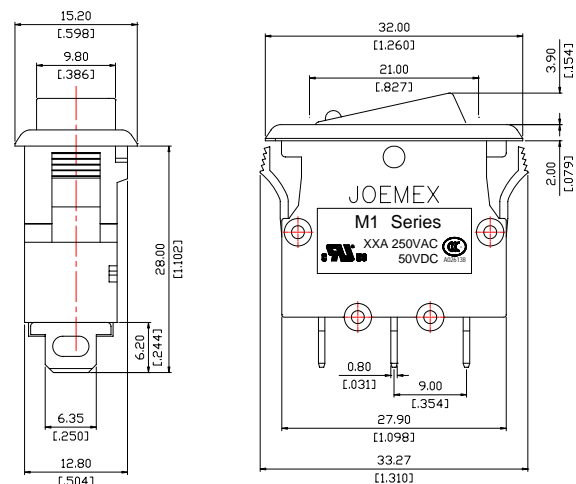
### Mechanical/Environmental Data

Operating Temperature Range: -10 °C to +60 °C.

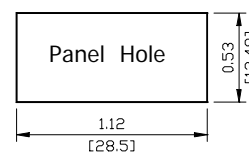
Termination: 250"(6.35 mm) quick connects, solder terminals

Mounting: Snaps into 1.122" x .531" (28.5 X 13.5) panel cutout .

### Outline Dimensions



### Recommended Panel Cutout



Panel thickness

M1 series circuit breakers accommodate panel thickness from 0.03 in. to 0.118 in. (0.75mm-3.0mm)