

# W51 series

## Rocker-Actuated Thermal Circuit Breaker/Power Switch With Optional Indicator Lamp



### 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.

Interrupt Capacity: 1,000 amps in accordance with UL standard 1077.  
 Resettable Overload Capacity: Ten times rated current.  
 Switch Endurance Cycling: Typically 6,000 operations at 100% of rating.  
 Reset Time: 60 seconds.

### Agency Approvals

W51 series is UL 1077 Recognized as Supplementary Protectors, File E69543, for Canada and the United States. Approved to VDE 0642/EN60934 (Circuit Breakers for Equipment) License Number 40017023 (for AC loads only). CCC mark compliant, certificate 2004010307123223.

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

### 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	0.050	10.0	0.025
6.0	0.042	15.0	0.017
7.0	0.036	20.0	0.0125
8.0	0.031		

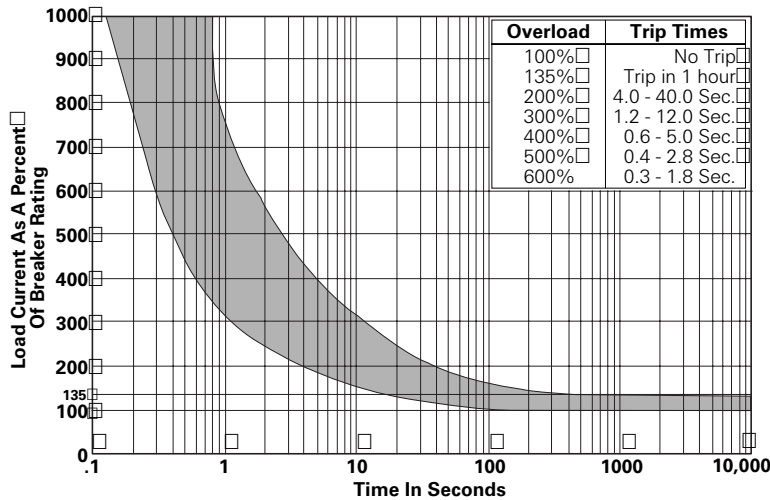
### Electrical Data @ 25°C

Calibration: Will continuously carry 100% of rating.  
 May trip between 101% and 134%, but must trip at 135%\* of rating within one hour at +25°C. \* 150% for 5-8A models  
 Dielectric Strength: 1,500VAC (60 seconds).  
 Insulation Resistance: 100 megohms.  
 Maximum Operating Voltages: 50VDC, 125 or 250VAC, 50/60 Hz. (model dependent).

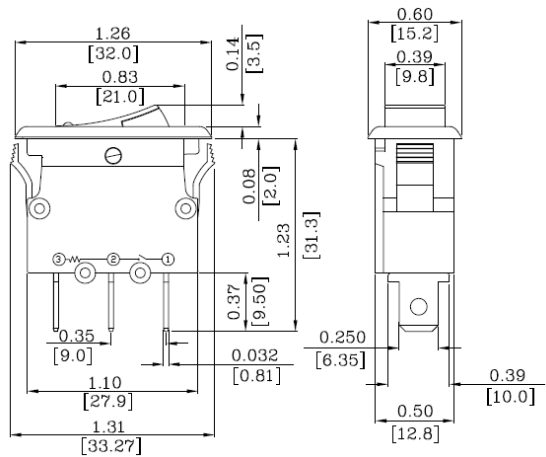
### Mechanical/Environmental Data

Operating Temperature Range: 0°C to +60°C for 10-20A models  
 0°C to +50°C for 5-8A models  
 Termination: .250" (6.35mm) quick connects, solder terminals or right angle PC terminals.  
 Mounting: Snaps into 1.122 x .531 (28.5 x 13.5) panel cutout.  
 Approximate Weight: 0.37 oz. (10.5g).

### Time vs. Current Trip Curve @ +25°C



### Outline Dimensions

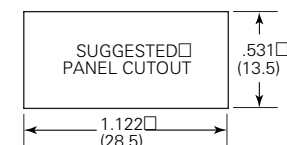


### Ambient Compensation Table

Ambient Temperature in °C	Rating Correction Factor	
	5-8A Models	10-20A 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		1.40

To use this chart: Divide the breaker rating by the correction factor to determine the compensated rating. Calculate the overloads in terms of the compensated rating to use the published trip curve.  
 Do not use these devices outside their specified operating temperature ranges.

### Recommended Panel Cutout



Panel Thickness  
 W51 series circuit breakers accommodate panel thicknesses from 0.030 in. to 0.118 in. (0.75 mm - 3.0 mm).



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