

## 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.


## 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.

## Electrical Data @ $\mathbf{2 5}^{\circ} \mathrm{C}$

Calibration: Will continuously carry 100\% of rating.
May trip between $101 \%$ and $134 \%$, but must trip at $135 \%$ of rating within one hour at $+25^{\circ} \mathrm{C}$.
Dielectric Strength: 1,500VAC (60 seconds).
Insulation Resistance: 100 megohms.
Maximum Operating Voltages: 50VDC; 125 or $250 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$. (model dependent).

## W51 series

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

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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.

## Typical Resistance vs. Current Rating @ $+25^{\circ} \mathrm{C}$

| Current <br> Rating <br> in Amps | Typical <br> Resistance <br> in Ohms | Current <br> Rating <br> in Amps | Typical <br> Resistance <br> 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 |  |  |

## Mechanical/Environmental Data

Operating Temperature Range: $0^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$.
Termination: .250" ( 6.35 mm ) quick connects, solder terminals or right angle PC terminals.
Mounting: Snaps into $1.122 \times .531(28.5 \times 13.5)$ panel cutout.
Approximate Weight: 0.37 oz . $(10.5 \mathrm{~g})$.

## Time vs. Current Trip Curve @ $+25^{\circ} \mathrm{C}$



## Ambient Compensation Table

| Ambient <br> Temperature <br> in ${ }^{\circ}$ C | Rating Correction Factor |  |
| :---: | :---: | :---: |
|  | 5-6A Models | 7-20A Models |
| 10 | .80 | .80 |
| 20 | .90 | .90 |
| 25 | 1.00 | 1.00 |
| 30 | 1.25 | 1.05 |
| 40 | 1.61 | 1.15 |
| 50 | 2.15 | 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.

## Outline Dimensions

Recommended Panel Cutout


## Panel Thickness

W51 series circuit breakers accommodate panel thicknesses from 0.030 in . to 0.118 in . $(0.75 \mathrm{~mm}-3.0 \mathrm{~mm})$.


## Ordering Information



## Our authorized distributors are more likely to stock the following items for immediate delivery.

| W51-A121B1-5 | W51-A121B1-15 | W51-A122B1-5 | W51-A122B1-15 | W51-A152A1-5 | W51-A152A1-15 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| W51-A121B1-10 | W51-A121B1-20 | W51-A122B1-10 | W51-A122B1-20 | W51-A152A1-10 | W51-A152A1-20 |

ORDERING NOTE: Some options illustrated below are not listed in the "Ordering Information" chart above. Options denoted by "Special" or "Special Order" in their descriptions are only offered on a special order basis. Other base and button colors and intermediate amp ratings are also available on a special order basis. All special order items are subject to extended leadtimes and significant minimum order quantities. Your Tyco Electronics sales engineer must consult with the factory before providing price and availability information regarding items with these options.

## Case Styles



Angular Button
Design
 Design

## Terminal Types



## Marking Options



