



#### **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 @ 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

Dielectric Strength: 1,500VAC (60 seconds). Insulation Resistance: 100 megohms.

Maximum Operating Voltages: 50VDC; 125 or 250VAC, 50/60 Hz. (model

dependent).

# W51 series

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

c**FL**°us





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°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		

#### Mechanical/Environmental Data

Operating Temperature Range: 0°C to +60°C.

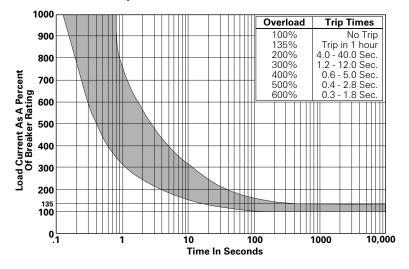
Termination: .250" (6.35mm) quick connects, solder terminals or right

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



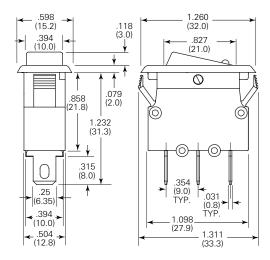
#### **Ambient Compensation Table**

Ambient Temperature	Rating Correction Factor		
in °C	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	

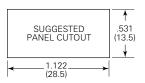
To use this chart: Divide the breaker rating by the correction factor to determine the compensated rating. Calculate the overloads in terms of the compensated rating to use the published trip curve.

Do not use these devices outside their specified operating temperature ranges.

#### **Outline Dimensions**



#### **Recommended Panel Cutout**

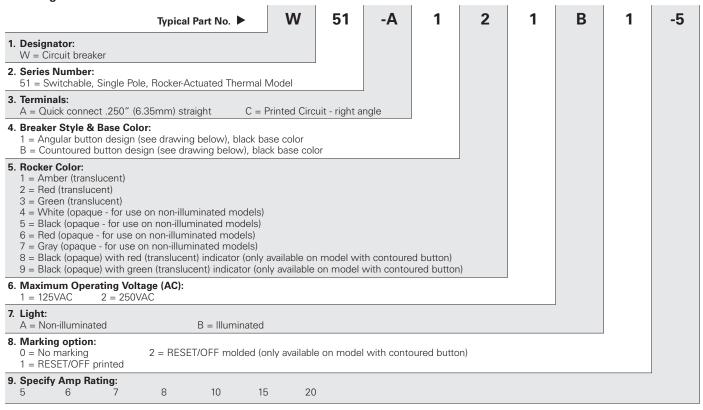


#### Panel Thickness

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



#### **Ordering Information**

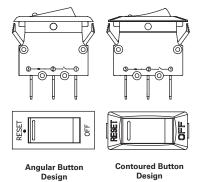


## Our authorized distributors are more likely to stock the following items for immediate delivery.

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

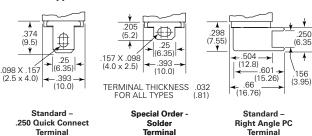
ORDERING NOTE: Some options illustrated below are not listed in the "Ordering Information" chart above. Options denoted by "Special" or "Special Order" in their descriptions are only offered on a special order basis. Other base and button colors and intermediate amp ratings are also available on a special 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.







Design



Terminal

#### **Marking Options**





Printed on

Bezel



For Contoured **Button Design** (Molded)



Standard -RESET/OFF Molded into bezel

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