

# W57 series

# Compact, Push To Reset Only **Thermal Circuit Breaker**





Interrupt Capacity: 1,000 amps in accordance with UL standard 1077. Resettable Overload Capacity: Ten times rated current.

Reset Time: 60 seconds.

#### **Features**

- New, compact, design.
- 4 to 20 amp ratings.
- · Cannot be manually tripped.
- Button extends for visual trip indication.
- Push button to reset breaker.
- Numerous mounting and termination options.

## **Agency Approvals**

W57 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 40007874 (excludes models rated 4A and >15A). CCC mark compliant, certificate 2004010307123217.

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also sek 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; 250VAC, 50/60 Hz.

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

Current Rating in Amps	Typical Resistance in Ohms	Current Rating in Amps	Typical Resistance in Ohms
4.0	0.062	10.0	0.025
5.0	0.050	12.0	0.021
6.0	0.042	15.0	0.017
7.0	0.036	20.0	0.012
8.0	0.031		

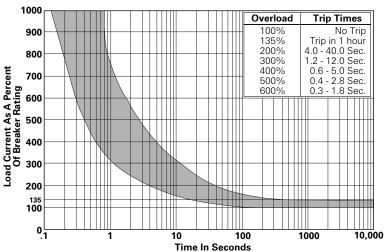
#### Mechanical/Environmental Data

Operating Temperature Range: 0°C to +60°C. **Termination:** .250" (6.35mm) quick connects.

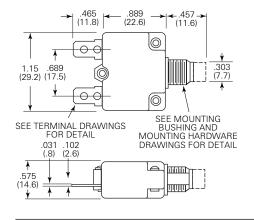
Mounting: Various options. See Ordering Information and drawings.

Approximate Weight: 0.5 oz. (14.3g).

# Time vs. Current Trip Curve @ +25°C

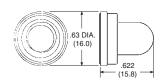


# **Outline Dimensions**



# **Optional Protective Boot**

Silicone rubber boot is bonded to integral alumimum nut.

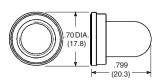


# 1-1423696-5

Black boot for W57 with 3/8"-24 bushing

#### 1-1423696-7

Clear boot for W57 with 3/8"-24 bushing.



# 1-1423696-4

Black boot for W57 with M11 X 1.0 bushing.

#### 1-1423696-6

Clear boot for W57 with M11 X 1.0 bushing.

# **Ambient Compensation Table**

Ambient Temperature	Rating Correction Factor		
in °C	3-6A 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	

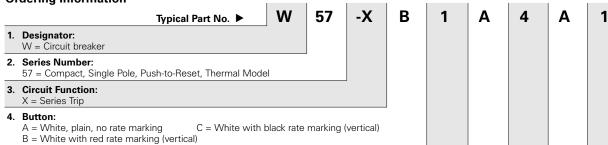
To use this chart: Divide the breaker rating by the correction factor to determine the compensated rating. Calculate the overloads in terms of the compensated rating to use the published trip curve.

Do not use these devices outside their specified operating temperature ranges

-4

0

# **Ordering Information**



7 = 10.8mm x 12.6mm long, metal

5. Mounting Bushing:

1 = 9.8mm x 9.6mm long, plastic 6 = 3/8" (one side flat) x 10.5mm) long, metal

2 = 3/8" (one side flat) x 10.5mm) long, plastic

Terminals:

A = Quick connect .250" (6.35mm) straight

**Mounting Hardware:** 

4 = Metal knurled nut/hex nut

5 = Plastic knurled nut

12 = Metal knurled nut

99 = None

**Mounting Hardware Packaging:** 

A = Assembled to bushing

B = Bulk unassembled

C = No mounting hardware

Maximum Operating Voltage (AC):

1 = 250VAC

10. Nameplate: 0 = None

11. Specify Amp Rating:

7

20†

†Not VDE

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

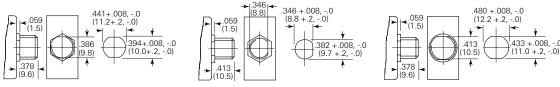
15

12

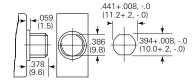
W57-XB1A4A10-15 W57-XB1A5A10-5 W57-XB1A5A10-15 W57-XB1A4A10-10 W57-XB1A5A10-10 W57-XB1A4A10-20 W57-XB1A5A10-20

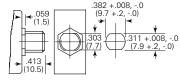
ORDERING NOTE: Many options illustrated below are not listed in the "Ordering Information" chart above. Options denoted by "Special" or "Special Order" in their descriptions are only offered on a special order basis. Additionally, mounting hardware can be ordered separately. These options are subject 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 these options.

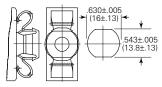
#### **Mounting Bushings and Recommended Panel Cutouts**



Standard Option 1 - M11 X 1.0 Thread Standard Option 2 & 6 - 3/8" - 24UNF Thread Standard Option 7 - M12 X 1.0 Thread





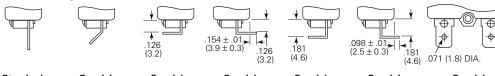


Special Order - M11 X 1.0 Thread

Special Order - 3/8" - 24UNF Thread

Special Order - Snap In Option

## Termination Options



Standard .250 QC Straight

Special .250 QC 459

Special .250 QC 90°

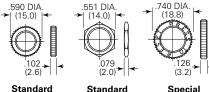
Special .250 QC/PCB 270°

Special .250 QC 90°

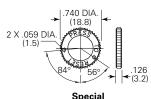
Special .250 QC/PCB 270°

Special .250 QC Straight (small hole)

## **Mounting Hardware Options**

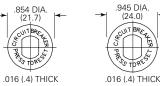


Standard Special Integrated **Knurled Nut** 



Special Integrated Knurled Nut with Small Holes

# Optional Nameplates



Special Embossed **Aluminum** 

Special Silver Printing On Black

**Knurled Nut**