



# W54 series

## Push To Reset Only P&B Thermal Circuit Breaker



### Features

- 5 to 40 amp ratings.
- Cannot be manually tripped.
- Button extends for visual trip indication.
- Push button to reset breaker.
- Numerous mounting and termination options.
- Choice of silver-cadmium oxide or silver-tin oxide contacts.
- Optional bottom marking of amperage rating.

**Insulation Resistance:** 100 megohms.

**Maximum Operating Voltages:** 50VDC; 250VAC.

**Interrupt Capacity:** 1,000 amps in accordance with UL standard 1077.

**Resettable Overload Capacity:** Ten times rated current.

**Reset Time:** 60 seconds.

### Agency Approvals

W54 series is UL 1077 Recognized as Supplementary Protectors, File E69543, for Canada and the United States. Available models meet Ignition Protection requirements in accordance with UL 1500 (excludes models rated >30A). CSA Accepted as Supplementary Protectors (Appliance Component Protectors), File 240027 (to 125VAC, excludes models rated >30A). Approved to VDE 0642/EN60934 (Circuit Breakers for Equipment) License Number 40007877 (excludes models rated >20A, models with screw terminals, models with silver-tin oxide contacts). CCC mark compliant, certificate 2004010307123217.

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 confirm 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	15.0	0.017
6.0	0.042	20.0	0.012
7.0	0.036	25.0	0.010
8.0	0.031	30.0	0.008
10.0	0.025	35.0	0.007
12.0	0.021	40.0	0.006

### 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).

### Mechanical/Environmental Data

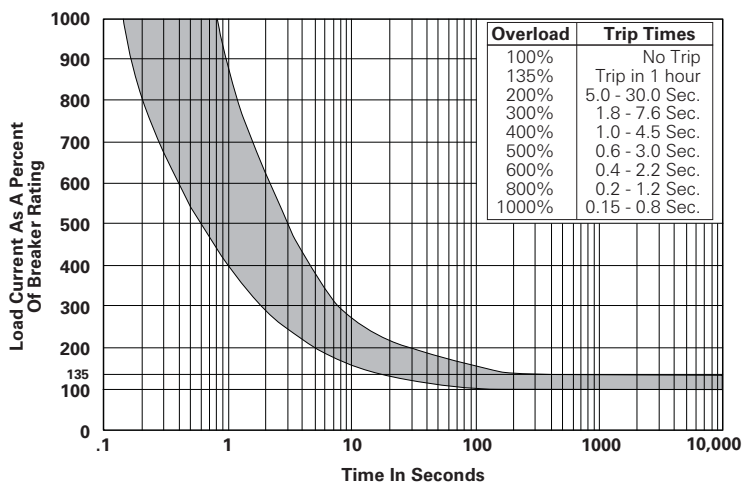
**Operating Temperature Range:** 0°C to +60°C.

**Termination:** .250" (6.35mm) quick connects or #8-32 screws.

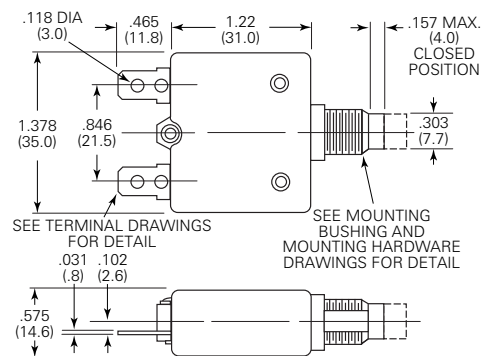
**Mounting:** Various options. See Ordering Information and drawings.

**Approximate Weight:** 0.9 oz. (25.0g).

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

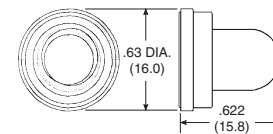


### Outline Dimensions

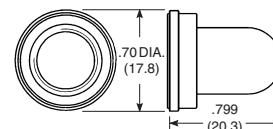


### Optional Protective Boot

Silicone rubber boot is bonded to integral aluminum nut.



**1-1423696-5**  
Black boot for W54 with 3/8"-24 bushing.



**1-1423696-6**  
Clear boot for W54 with M11 X 1.0 bushing.

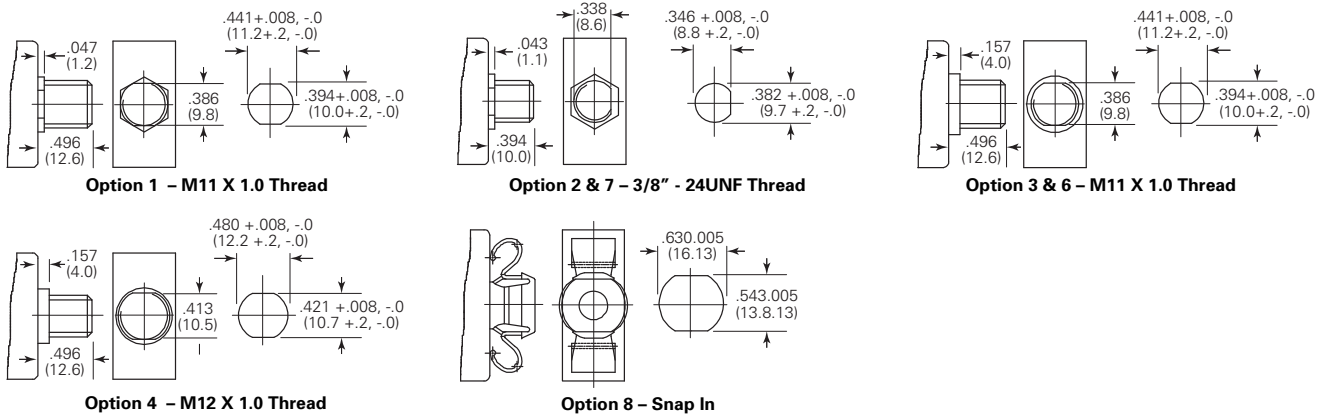
### Ambient Compensation Table

Ambient Temperature in °C	Rating Correction Factor	
	5-8A Models	9-30A Models
10	.90	.80
20	.98	.90
25	1.00	1.00
30	1.10	1.05
40	1.25	1.15
50	1.61	1.31
60	2.00	1.55

**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.



### Mounting Bushings and Recommended Panel Cutouts



### Mounting Hardware Options



### Optional Bottom Marking of Rating



### Mounting Hardware Dimensions

Dimension Code	Bushing Diameter	Plastic Knurled Nut	Integrated Plastic Knurled Nut w/Holes	Metal Knurled Nut	Metal Hex Nut	Lockwasher
A	3/8"	.74 (18.8)	–	.56 (14.2)	.55 (14.0)	.49 (12.5)
	M11	.74 (18.8)	.74 (18.8)	.59 (15.0)	.55 (14.0)	.587 (14.9)
	M12	–	–	.59 (15.0)	.55 (14.0)	.626 (15.9)
B	3/8"	.126 (3.2)	–	.079 (2.0)	.079 (2.0)	.02 (.5)
	M11	.126 (3.2)	.13 (3.3)	.102 (2.6)	.118 (3.0)	.02 (.5)
	M12	–	–	.102 (2.6)	.079 (2.0)	.02 (.5)

### Mounting Hardware Ordering Information

Mounting Bushing Material	Mounting Bushing Code	Plastic Knurled Nut	Integrated Plastic Knurled Nut w/Holes	Metal Knurled Nut	Metal Hex Nut	Lockwasher
Metal	1 (M11)	–	–	1423696-4	1423696-6	1-1423696-2
	2 (3/8")	–	–	1-1423696-0	1423696-3	1-1423696-1
	3 (M11)	–	–	1423696-4	1423696-6	1-1423696-2
	4 (M12)	–	–	1423696-5	1423696-7	1-1423696-3
Plastic	6 (M11)	1423696-8	2-1423696-2	–	–	–
	8 (3/8")	1423696-2	–	–	–	–

### Nameplates

