

# Type CBW58

## Thermal Circuit Breaker

### Push to Reset – Standard Profile



www.optifuse.com (619) 593-5050

#### Specifications:

Push to Reset – Standard Profile

Amperage Range: 3A - 50A

Voltage: 125 / 250 VAC, 50 VDC

Frequency: 50-60 Hz

Dielectric Strength: 1,500 VAC / 1 Minute

Interrupting Rating: 3-50A 1000A @ 125/250VAC  
 3-30A 400A @ 125/250 VAC  
 3-50A 300A @ 50 VDC  
 3-20A 400A @ 125 VAC, CSA

Marine Ignition Protected to SAE J1171 and UL1500

Insulation Resistance: > 500M Ω

Contact Endurance: 125 VAC @ 150% of Rated Current-500 Cycles.

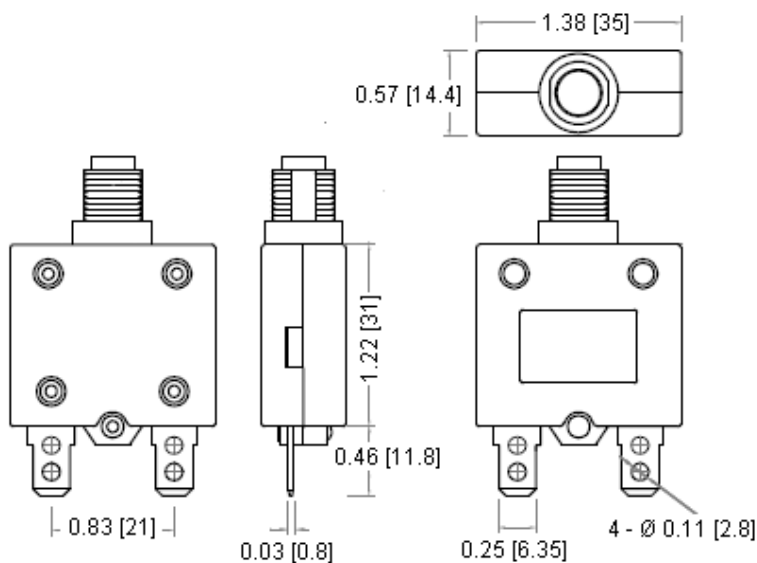
Reset Time: 60 seconds

Body – Black

Terminal Finish – Tin Plated

Time-Current Characteristics @ 25°C			
100%	150%	200%	300%
Max	Max	Max	Max
No trip	1hr	40s	10s

#### Mechanical Dimensions: Inches [mm]



#### Agency Standards and Listings:



RoHS  
Compliant

UR: 3A-50A, 125/250 VAC, 50VDC

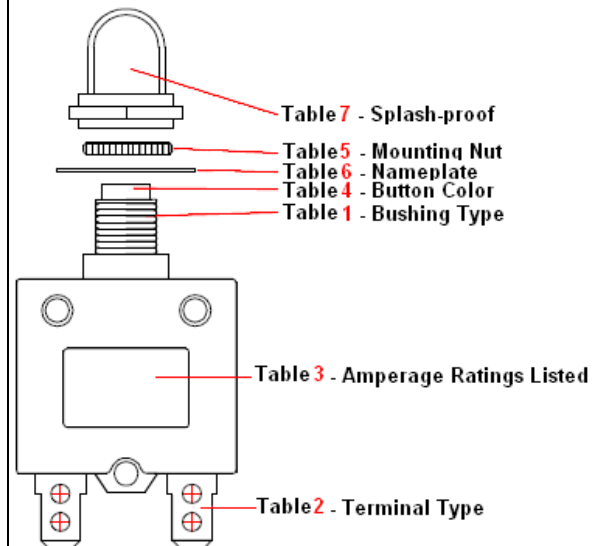
CSA: 3A-30A, 125/250 VAC

CCC : 3-30A, 125 VAC

TUV: 3-30A, 125/250 VAC, 32 VDC

VDE: 3A-16A, 125/250 VAC

#### Part / Accessories Descriptions:



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Part Number Information									
<b>CBW58-</b>	<b>X</b>	<b>Y</b>	<b>-</b>	<b>ZZ</b>	<b>-</b>	<b>B</b>	<b>N</b>	<b>P</b>	<b>S</b>
	<b>Table 1</b>	<b>Table 2</b>		<b>Table 3</b>		<b>Table 4</b>	<b>Table 5</b>	<b>Table 6</b>	<b>Table 7</b>

## Mechanical Dimensions: Inches [mm]

**Table 1 - Where X is Bushing Style**

<b>H</b>	<b>Metal</b> M11 – 10.8 mm diameter - 9.8 mm pinch point – 12.6 mm high
<b>B</b>	<b>Metal</b> M11 – 10.8 mm diameter - 9.8 mm pinch point – 12.6 mm high
<b>V</b>	<b>Metal</b> M12 - 11.8 mm diameter – 10.7 mm pinch point – 12.6 mm high
<b>G</b>	<b>Metal</b> 3/8” 27 Thread – 9.5 mm diameter – 8.5 mm pinch point – 12.6 mm high
<b>P</b>	Plastic M11 – 10.8 mm diameter - 9.8 mm pinch point – 12.6 mm high
<b>Q</b>	Plastic M12 – 11.8 mm diameter – 10.7 mm pinch point – 12.6 mm high
<b>E</b>	Plastic 3/8” 27 Thread – 9.5 mm diameter – 8.5 mm pinch point – 12.6 mm high
<b>A</b>	Automatic Reset – No Bushing

<b>H - Metal</b> M11XP1.0	<b>B - Metal</b> M11XP1.0	<b>V - Metal</b> M12XP1.0	<b>G - Metal</b> 3/8"-27T	<b>Measurements</b>
<b>P - Plastic</b> M11XP1.0	<b>Q - Plastic</b> M12XP1.0	<b>E - Plastic</b> 3/8"-27T	<b>A - Automatic, No Bushing</b>	

Bushing Type vs. Panel Hole	H, B, P	V or Q	G or E

Note: All specifications subject to change without notice.

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## Mechanical Dimensions: Inches [mm]

**Table 2 - Where Y is Terminal Configuration**

S	B	R	4	5	6	7
Straight 0.46 [11.8]	90° Bend	90° Reverse Bend	90° Bend Load Pin	90° Bend Line Pin	Straight 0.31 [8]	90° Bend Reverse Bend
8	9	X	F	L	J	L4
45° Bend	45° Reverse Bend	Straight 0.13 [3.2]	Screw #8-32	Screw #8-32 90° Bend	Screw #8-32 90° Reverse Bend	Screw #8-32 90° Bend Line Pin

**Table 3 - Where ZZ is Amperage**

**3-50A** (03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 15, 16, 18, 20, 22, 25, 30, 35, 40, 45, 50)

See comments on first page for approvals information.

The above represents only standard current rates. Please contact factory for additional ratings.

**Table 4 - Where B is Button Color**

<b>Blank</b>	Black Button	
<b>W</b>	White Button	
<b>R</b>	Red Button	
<b>1</b>	Black Button w/ Amperage in White	
<b>5</b>	White Button w/ Amperage in Black	
<b>6</b>	Red Button w/ Amperage in White	

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## Mechanical Dimensions: Inches [mm]

**Table 5 - Where N is Nut Type**

Blank	H	C	P	Q	X
Metal Knurlnut	Metal Hexnut (M11xP1.0) H=0.55[14] (M12xP1.0) H=0.59[15]	Metal Knurlnut	Plastic Integraged Knurlnut	Plastic Knurlnut	Plastic Integraged Knurlnut

**Table 6 - Where P is Nameplate**

Blank = None	
<b>B</b>	Black nameplate Circuit Breaker Press to Reset
<b>W</b>	White nameplate Circuit Breaker Press to Reset
<b>A</b>	Black nameplate Circuit Breaker Press to Reset
<b>S</b>	Black nameplate Suppl. Prot. Press to Reset
<b>N</b>	White nameplate Suppl. Prot. Press to Reset

B	Black plate	A	Black plate	S	Black plate
W	White plate			N	White plate

**Table 7 - Where S is Splash-proof**

Blank – None

**D** - For H, V, B, G, P, Q, E Bushing Styles only

**V** - For H, B, V, P, Q Bushing Styles only

**F** - For H, V, B, G, P, Q, E Bushing Styles only

**K** - For G, E Bushing Styles only

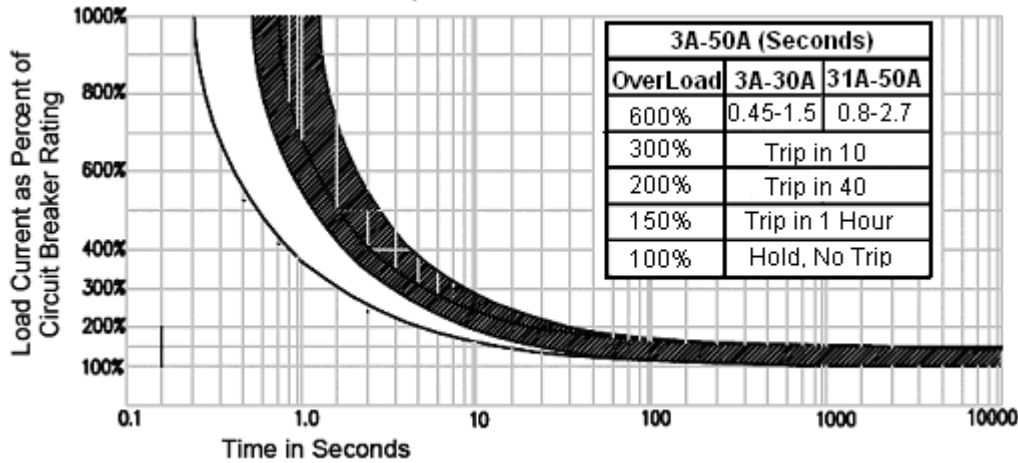
D	V	F	K
M11XP1.0 M12XP1.0 3/8" - 27T	M11XP1.0 M12XP1.0	M11XP1.0 M12XP1.0 3/8" - 27T	3/8" - 27T
Clear	Clear	Clear	Black

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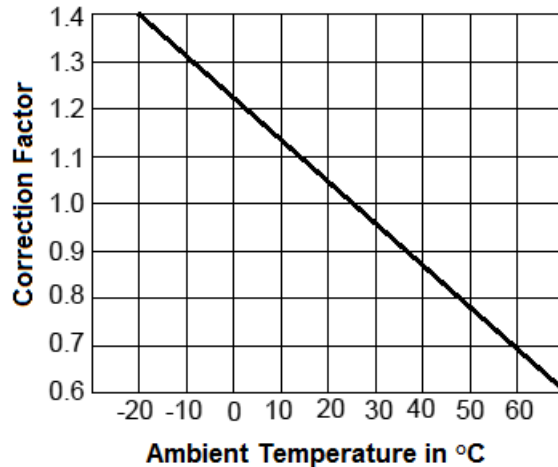
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**Trip Time Curve @ +25°C**




Max. Internal Resistance	
3A-4A	0.050Ω
5A-6A	0.040Ω
7A-8A	0.025Ω
9A-11A	0.020Ω
12A-13A	0.010Ω
14A-16A	0.008Ω
17A-25A	0.007Ω
26A-35A	0.006Ω
40A-50A	0.005Ω

**Ambient Compensation Chart**



**Ambient Temperature Correction Factor:**

The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the current breaker current ratings by the derating factor shown above.

<p><b>Warning:</b></p> 	<ul style="list-style-type: none"> <li>-Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.</li> <li>-Devices are intended for occasional overcurrent protection. Applications for repeated overcurrent condition and/or prolonged trip are not anticipated.</li> <li>-Avoid contact of device with chemical solvent. Prolonged contact may damage the device performance.</li> </ul>
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