

Type CBW57

Thermal Circuit Breaker

Push to Reset – Low Profile



www.optifuse.com (619) 593-5050

Specifications:

- Push to Reset - Low Profile
- Amperage Range: 3A - 30A
- Voltage: 125 / 250 VAC, 32 VDC
- Frequency: 50-60 Hz
- Dielectric Strength: 1500 VAC / 1 Minute
- Interrupt Rating: 3-30A 1000A @ 125/250 VAC
 - 3-20A 400A @ 125/250 VAC
 - 3-30A 300A @ 50 VDC
- Marine **Ignition Protected** to SAE J1171 and UL1500
- Insulation Resistance: > 500M Ω
- Contact Endurance: 125 VAC @ 150% of Rated Current - 500 Cycles.
- Reset Time: within 60 seconds
- Body - Black
- Terminal Finish - Tin Plated
- Torque Rating - plastic nut on plastic thread: 6KGfcm
 - metal nut on metal thread: 10KGfcm
 - metal nut on plastic thread: 6KGfcm

Agency Standards and Listings:



RoHS
Compliant

UR: 3A-30A, 125/250 VAC, 50 VDC

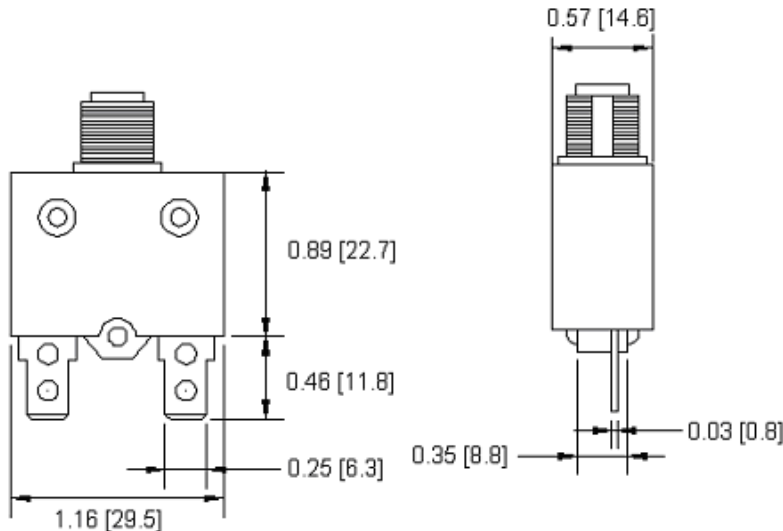
CCC: 3-20A, 125/250 VAC

TUV: 3-20A, 125/250 VAC, 32 VDC

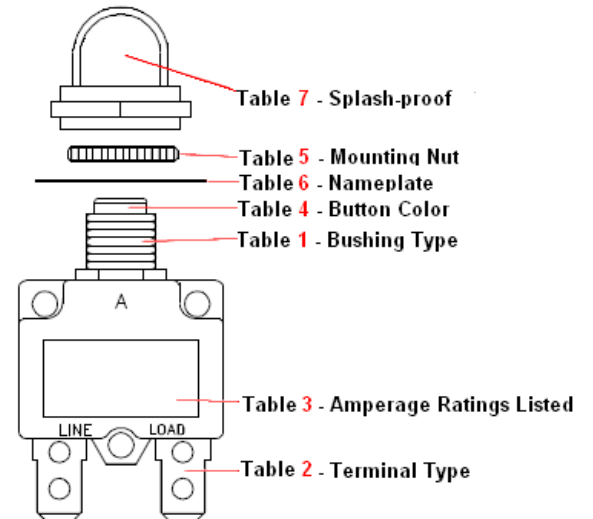
VDE: 3A-16A, 125/250 VAC

Time-Current Characteristics @ 25°C					
100%	150%	200%		300%	
Max	Max	Min	Max	Min	Max
No trip	1hr	5s	25s	1.6s	4.8s

Mechanical Dimensions: Inches [mm]



Part / Accessories Descriptions:



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

Type CBW57 Thermal Circuit Breaker Push to Reset – Low Profile



www.optifuse.com (619) 593-5050

Mechanical Dimensions: Inches [mm]

Part Number Information									
CBW57-	X	Y	-	ZZ	-	B	N	P	S
	Table 1	Table 2		Table 3		Table 4	Table 5	Table 6	Table 7

Mechanical Dimensions: Inches [mm]

Table 1 - Where X is Bushing Style

H	Metal M11 – 10.8 mm diameter - 9.8 mm pinch point – 9.6 mm high
B	Metal M11 – 10.8 mm diameter - 9.8 mm pinch point – 9.6 mm high
G	Metal 3/8” 27 Thread – 9.5 mm diameter – 8.5 mm pinch point – 12.5 mm high
P	Plastic M11 – 10.8 mm diameter - 9.8 mm pinch point – 9.6 mm high
Q	Plastic M12 – 11.8 mm diameter – 10.8 mm pinch point – 8.2 mm high
E	Plastic 3/8” 27 Thread – 9.5 mm diameter – 8.5 mm pinch point – 12.5 mm high
S	Plastic – Panel – 8 mm high
C	Plastic – Snap-in – 9.8 mm high
A	Automatic Reset – No Bushing

H - Metal M11XP1.0	B - Metal M11XP1.0	G - Metal 3/8"-27T	P - Plastic M11XP1.0	Measurements										
					A 0.43 [10.8]									
					B 0.53 [13.5]									
					C 0.39 [9.8]									
					D 0.38 [9.6]									
					E 0.49 [12.5]									
					F 0.32 [8.2]									
					G 0.62 [15.8]									
					H 0.54 [13.8]									
					J 0.33 [8.5]									
<table border="1"> <thead> <tr> <th>Bushing Type vs. Panel Hole</th> <th>H, P</th> <th>Q</th> <th>G, E</th> <th>C</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Bushing Type vs. Panel Hole	H, P	Q	G, E	C						K 0.37 [9.5]
Bushing Type vs. Panel Hole	H, P	Q	G, E	C										
<table border="1"> <thead> <tr> <th>A - Automatic, No Bushing</th> </tr> </thead> <tbody> <tr> <td></td> </tr> </tbody> </table>				A - Automatic, No Bushing		L 0.51 [13.0]								
A - Automatic, No Bushing														
				M 0.32 [8.2]										
				N 0.46 [11.8]										

Note: All specifications subject to change without notice.

Type CBW57
Thermal Circuit Breaker
Push to Reset – Low Profile



www.optifuse.com (619) 593-5050

Mechanical Dimensions: Inches [mm]

Table 2 - Where *Y* is Terminal Configuration

S	B	R	4	5	6	8
Straight 0.46 [11.8]	90° Bend	90° Reverse Bend	90° Bend Load Pin	90° Bend Line Pin	Straight 0.31 [8]	45° Bend
9	X	F	L	J	L4	
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

03A to 20A (03, 3.5, 04, 05, 06, 07, 7.5, 08, 10, 11, 12, 13, 15, 16, 17, 18, 20, 22, 25, 30)

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

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

Type CBW57 Thermal Circuit Breaker Push to Reset – Low Profile



www.optifuse.com (619) 593-5050

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 Integrated Knurlnut 	Plastic Knurlnut 	Plastic Integrated Knurlnut
For Bushings: H, B, P, Q Not available for G or E	For Bushings: H, B, G, P, Q, E	For Bushings: H, B, P, Q Not available for G or E	For Bushings: H, B, G, P, Q, E	For Bushings: H, B, G, P, Q, E Default for G and E	For Bushings: H, B, G, P, Q, E

Table 6 - Where P is Nameplate

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

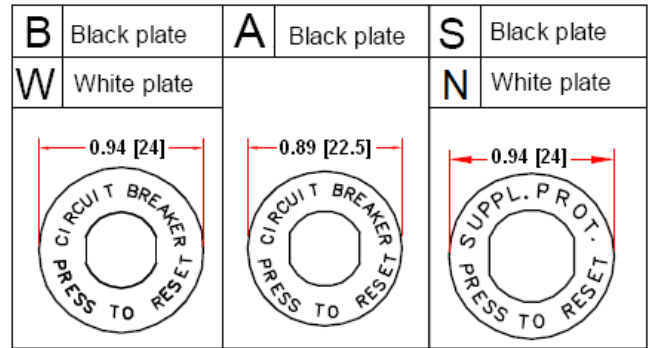


Table 7 - Where S is Splash-proof

Blank – None

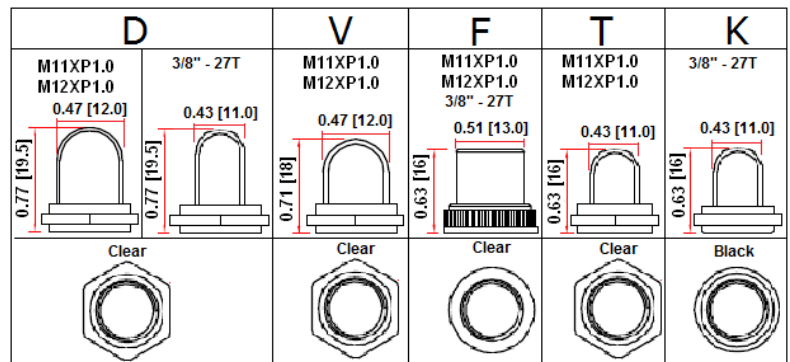
D – For H, B, G, P, Q, E Bushing Styles only

V – For H, B, P, Q Bushing Styles only

F – For H, B, G, P, Q, E Bushing Styles only

T – For H, B, P, Q Bushing Styles only

K – For G, E Bushing Styles only



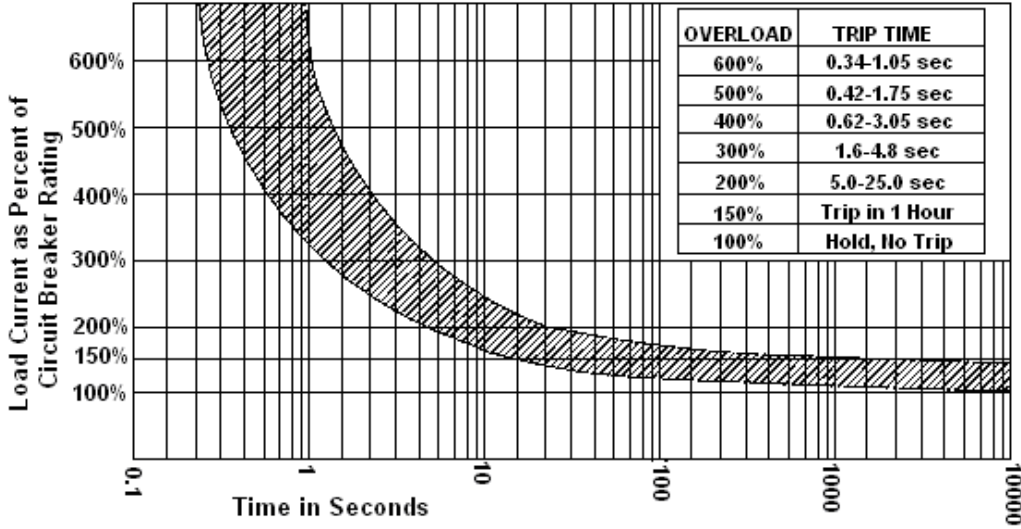
Note: All specifications subject to change without notice.

**Type CBW57
Thermal Circuit Breaker
Push to Reset – Low Profile**



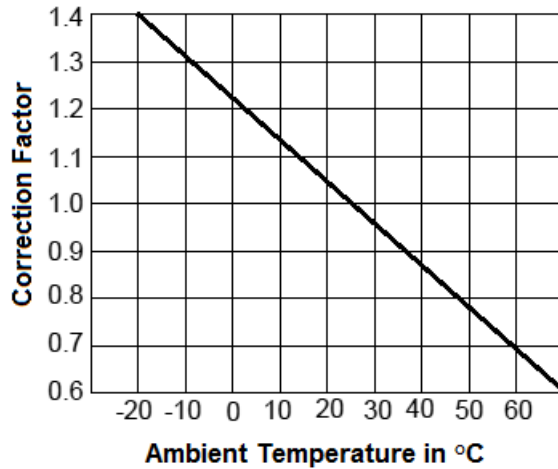
www.optifuse.com (619) 593-5050

Trip Time Curve @ +25°C



Max. Internal Resistance at 25°C	
Current Rating	Maximum 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

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.