

Technical sheet of SCB98 Series Thermal Circuit Breaker

SWEETA

Technical Data

Type of tripping	Thermal positively trip free
Rated current In	3.0 ~50.0A
Conditional short circuit Inc	3.0~50.0A: 1000 A, SC (C1)
Maximum Operating Voltages	250VAC , 32VDC ; 50/60 Hz.
Dielectric strength	> 1500 Vac 60sec
Ambient temperature	-20 ~ 60℃
Insulation resistance	> 100 Mohm 500Vdc
Interrupt Capacity	1,000 amps
Reset Time	Within 60 seconds.
Temperature Rise at Terminal Block	Less than 65° c at 100% of rated current applied continuously
Endurance (contacts)	150% of rated current >500 cycles
Vibration	57Hz acceleration 30m/s2(3g)in X.Y.Z. directions (2time/min)
Shock	Acceleration 300m/s2(30g)in X.Y.Z. directions
Corrosion	96 hours at 5% salt spray
Humidity	Ambient temp 40±2℃ 96 hour 90 ~ 95%RH Re-testing after 30 min at: normal temperature/normal humidity
Heat-resistant	96 hour at ambient temp 60 ± 2℃ Re-testing after 30 min at normal temperature/normal humidity
Clod-resistant	96 hour at ambient temp 60 ± 2℃ Re-testing after 30 min at normal temperature/normal humidity

Agency Approvals

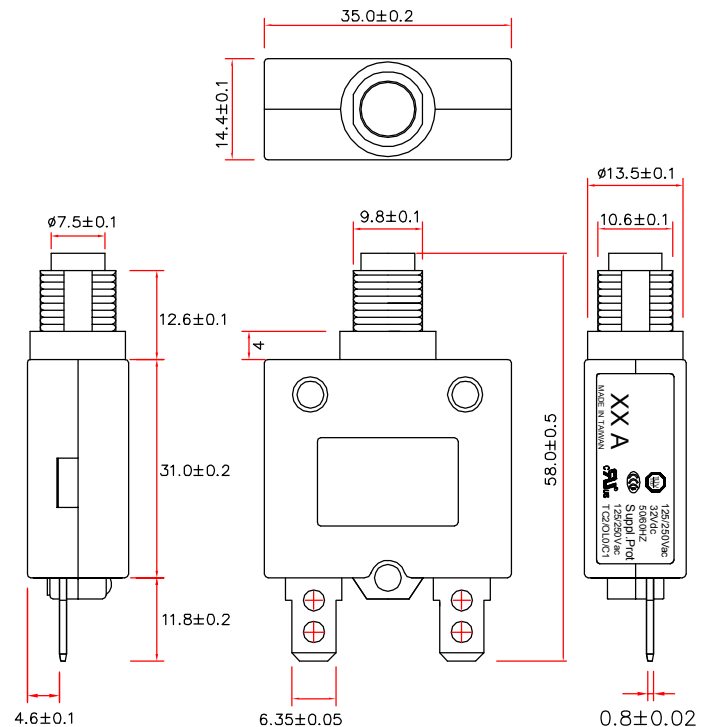
UL 1077	3A~50A TC2/OL0/C1 1000A
CSA C22.2 N0235	3A~30A TC1/OL1/U3 400A
VDE EN60934	3A~16A
TUV SUD EN60934	3A~30A
CCC GB7701	3A~40A

Applications

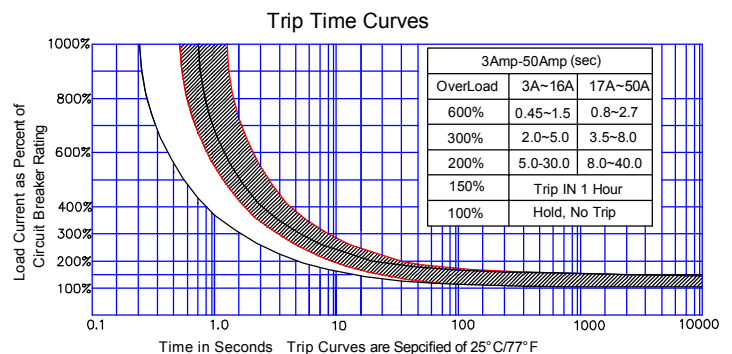
- Power tools
- Industrial equipment
- Medical equipment
- Power generators
- Motors
- UPS

Mechanical/Environmental Data

Operating Temperature Range: -20°C to + 60°C.
Termination: 6.35mm quick connects. (See Ordering Information)
Mounting: Various options. (See Ordering Information and drawings.)
Approximate Weight: 24.3g



Trip curves and effect



Effect of ambient temperature

Ambient Rating Correction Factor			
in °C	3A~12A	13A~25A	26A~50A
-10	1.50	1.30	1.27
0	1.40	1.27	1.23
10	1.30	1.07	1.04
25	1.00	1.00	1.00
40	0.88	0.94	0.96
50	0.78	0.85	0.88
60	0.70	0.78	0.82
70	0.60	0.74	0.78
80	0.50	0.70	0.75

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 below.

Typical Resistance vs. Current Rating @ +25°C

Current Rating in Amps	Typical Resistance in Ohms
3A~4A	0.120
5A~6A	0.075
7A~13A	0.050
14A~20A	0.010
21A~30A	0.008
31A~40A	0.006
41A~50A	0.004

Order Guide

SWEET A PRODUCTS CORP.

SCB 98-15-A1 B 1 4- B 0 B- N B

Series No.	(Table A)
Amp Rating.	(Table B)
Bushing Type.	(Table C)
Color of Button.	(Table D)
Terminal Type.	(Table E)
Voltage.	3=125/250Vac, 4=125/250Vac, 32Vdc (T-rags), 5=Client designation 9=CSA U3 type
Mounting Nut Type.	(Table F)
Waterproof Type.	(Table G)
Nameplate Type.	(Table H)
Terminal Finish.	N=Plate with Nickel 0=No plate
Body Type.	B=Black W=White

(Table B) Bushing Type

Bushing type= A1	Bushing type= B1	Bushing type= A2	Bushing type= A3
Metal M11XP1.0	Metal M11XP1.0	Metal M12XP1.0	Metal 3/8"-27T

Bushing type= B3	Bushing type= B7	Bushing type= P1	Bushing type= P2
Metal 3/8"-27T	Metal 7/16"-17T	Metal M11XP1.0	Plastic M12XP1.0

Bushing type= P3	Bushing type= P5	Bushing type= KF	Bushing type= HK
Plastic 3/8"-27T	Plastic Snap in	Plastic Snap in	Plastic Snap in

P1 A1 B1	A2 P2	P3 A3 B3	PS/KF/HK	B7
Panel Hole				

(Table A) Standard Rating

03= 3.0A	16= 16.0A
04= 4.0A	17= 17.0A
05= 5.0A	18= 18.0A
06= 6.0A	20= 20.0A
07= 7.0A	25= 25.0A
08= 8.0A	30= 30.0A
10= 10.0A	35= 35.0A
12= 12.0A	40= 40.0A
13= 13.0A	45= 45.0A
15= 15.0A	50= 50.0A

(Table C) Color of Button Type

B=Black	S=White button w/ver black print
R=Red	
W=White	
1=Black w/ver white print	
6=Red button w/ver white print	

(Table D) Terminal Type

Type= 1	Type= 2	Type= 3	Type= 4	Type= 5	Type= 6	Type= 7
Straight 11: 9mm	90° bend up	90° bend down	90° bend Line pin	90° bend Lead pin	Straight 8: 9mm	90° bend up / down

Type= 8	Type= 9	Type= X	Type= F	Type= L	Type= J
45° bend up	45° bend down	Straight 3: 2mm	Screwa #8-32	Screwa #8-32	Screwa #8-32

(Table E) Mounting Nut Type

None	Type= P	Type= Q	Type= A	Type= B	Type= C	Type= 4
	Plastic Integrated Nutnut	Plastic Nutnut	Metal Nutnut	Metal Nutnut	Metal Nutnut	Plastic-Metal Nutnut

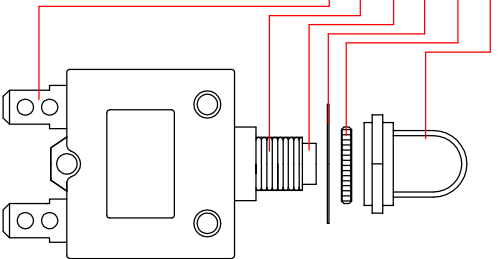
(Table G) Nameplate Type

None	B	A	S
	Black plate	Black plate	White plate

(Table F) Waterproof Type

0	Type= R	Type= F	Type= V
None	M12XP1.0 3/8"-27T	M11XP1.0 M12XP1.0	M11XP1.0 M12XP1.0

Table F Waterproof Type
Table E Mounting Nut Type
Table G Nameplate Type
Table C Color of Button Type
Table B Bushing Type
Table D Terminal Type



5		TOLERANCE	TOLERANCE	APPROVED	CHECK	DESING	DRAWER	UNIT	mm
4		XX.XX	±0.05					SCALE	1:1
3		XX.XX	±0.1					REV	E/1
2		XX	±0.15					DATE	2012.06.01
1		ANGLE	TOLERANCE ±1°	FILE NO	SCB98 Series Thermal Circuit Breaker			TITLE	SCB98 Series Order-guide
NO	DESCRIPTION	APPROVED	DATE	X.X	±0.5°	喜 威 達 企 業 股 份 有 限 公 司	DRAWING NO	98-002	