

Thermal Circuit Breaker

38 Series

Technical Data

- Current rating range 3~30A
- Input voltage rating 125/250VAC; 32/50VDC
- Interrupting Capacity 125/250VAC x 1,000A(UL 1077)
- Typical life 1,000 operations at 200% overload.
- Insulation co-ordination Rated impulse withstand voltage 2.5kV
- Dielectric Strength > 1,500VAC/min.
- Insulation Resistance >100MOHM (DC 500V)



Mechanical/Environmental Data

- Operating Ambient Temperature: -10°C to +60°C
- Termination: 250"(6.35mm) quick connects or solder terminals
- Mounting: Various options. See Ordering Information and drawings

Compliance with Rohs

The product accords with the requirement of ROHS(2011/65/EU)
Contacts use Exempted item of RoHS Directive 2010/571/EU 8(a)

Compliance with REACH, PAHS, PH1, PH2, PH3

- Ignition Proof UL Standard 1500 Protectors, Supplementary for Marine Electrical & Fuel System (Guide PEQZ2, File 466099)

Typical applications

Transformers, Motors, Battery chargers, Power supplies, appliances, extra low voltage systems, machinery.

Calibration (at 25°C)

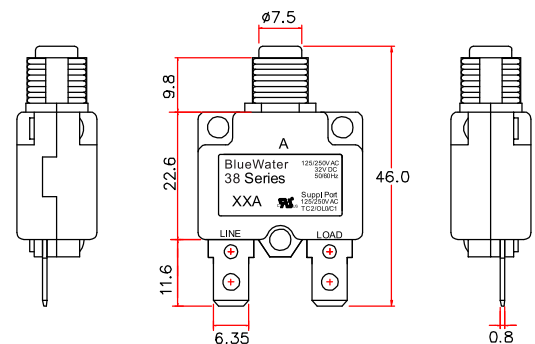
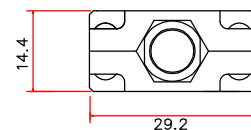
- 100% of Rated Current: Hold, No Trip
- 150% of Rated Current: Trip Within 1 Hour.
- 200% of Rated Current: 5-30 sec Trip
- 300% of Rated Current: 1.5-5.0 sec Trip

Approval

- Approval & File No. Rated current Rated voltage
- CUL UL E466099 3-30A 125/250VAC; 50VDC

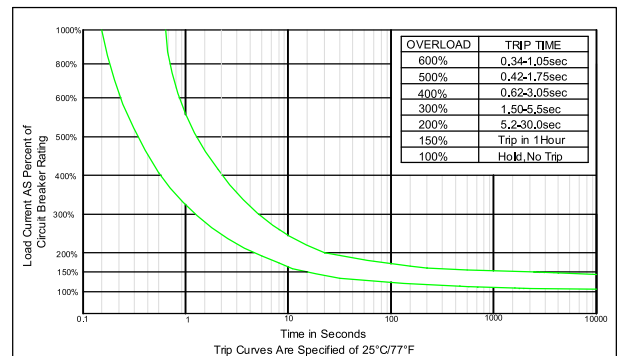
Max. Internal Resistance

Amp rating	Max resistance
3.0 - 5.0Amp	<0.225 Ohms
6.0 - 8.0Amp	<0.175 Ohm
9.0 - 12.0Amp	<0.125 Ohm
13.0 - 16.0Amp	<0.050 Ohm
17.0 - 20.0Amp	<0.040 Ohm
21.0 - 25.0Amp	<0.030 Ohm
26.0 - 30.0Amp	< 0.020 Ohm



* Dimension in mm:

• 38Series 3A-30A Trip Time Curves



• Ambient Temperature Correction Factor

Ambient temperature	-10°C	0°C	10°C	25°C	35°C	40°C	50°C	60°C
Multiplication factor	0.77	0.83	0.91	1.00	1.06	1.18	1.37	1.47

The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping. Please multiply the circuit breaker current ratings by the multiplication factor shown below.

Example : Normal Continuous Current = 10A
Ambient Temperature = 40°C
Division Factor = 1.18
Recommended Rating= 10A(1.18) = 11.8A
Select the Nearest Rating = 12A

#38-XX-A1B14-P00NB (Black)
#38-XX-A1W14-P00NB (White)
To be used with #3200-2001-XXX

Order Guide	38- 12- A1 B 1 4- P 0 0 N B
Series No.	
Amp Rating.	(Table A)
Bushing Type.	(Table B)
Color of Button.	(Table C)
Terminal Type.	(Table D)
Voltage.	1=UL & CSA 125Vac, 2=TUV & CCC 250Vac, 3=1+2 125/250Vac, 4=UL+TUV+CCC 125/250Vac/32Vdc, 5=Client designation 6=UL 125/250Vac/50Vdc, 8=VDE 125/250Vac, 9=CSA 125Vac U3 type
Mounting Nut Type.	(Table E)
Waterproof Type.	(Table F)
Nameplate Type.	(Table G)
Terminal Finish.	S=Plate with Tin N=Plate with Nickel 0=No plate
Body Type.	B=Black W=White

Standard Rating (Table A)	
03= 3.0A	12= 12.0A
3.5= 3.5A	13= 13.0A
04= 4.0A	15= 15.0A
05= 5.0A	16= 16.0A
06= 6.0A	17= 17.0A
07= 7.0A	18= 18.0A
08= 8.0A	20= 20.0A
09= 9.0A	22= 22.0A
10= 10.0A	25= 25.0A
11= 11.0A	30= 30.0A

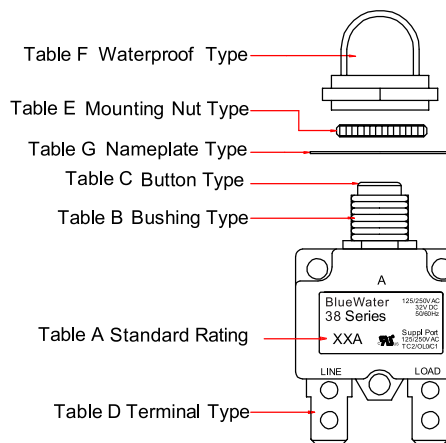
Bushing Type (Table B)					
P1 Plastic M11XP1.0	P2 Plastic M12XP1.0	P3 Plastic 3/8"-27T	PL Plastic No thread		
KF Plastic Snap in	PS Plastic Snap in	AW (White) Plastic No thread	AB (Black) Plastic No thread	P0 Plastic No thread	
A1 Metal M11XP1.0	B1 Metal M11XP1.0	A3 Metal 3/8"-27T	B3 Metal 3/8"-27T		
Panel Hole					
P1,A1,B1	A2,P2	P3,A3,B3	AW/AB	P0	PS,KF

Mounting Nut Type (Table E)							
0 None	P Plastic Integrated Knurl nut	Q Plastic Knurl nut	A Metal Knurl nut	B Metal Hexnut M11 H=14 M12 H=15	C Metal Metal	4 Plastic Plastic	5 Plastic Plastic

Waterproof Type (Table F)						
0 None	R	M	V	F	T	U

Terminal Type (Table D)													
1 Straight 11.8mm	2 90° bend	3 90° bend	4 Line pin Straight Load pin 90° bend	5 Line pin 90° bend Load pin Straight	6 Straight 8.0mm	7 Line pin 90° bend down Load pin bend up	8 45° bend up	9 45° bend down	X Straight 4.0mm	F Screw #8-32 Straight	L Screw #8-32 90° bend up	J Screw #8-32 90° bend down	G Line pin Screw 90° bend Load pin SQ 25 Straight

* The specification subject to change without notice. The drawing is for reference only.



Button Type (Table C)		
B = Black button	W = White button	R = Red button
1 Normal Amp stamp Amps=white	5 Normal Amp stamp Amps=black	6 NORMAL AMP STAMP Amps=white
7	8	9
X	Y	Z

Nameplate Type (Table G)					
0 None	B Black plate	A Black plate	S Black plate	C Black plate	L Black plate