

## Thermal Circuit Breaker

38 Series

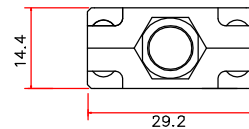
### Technical Data

- 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

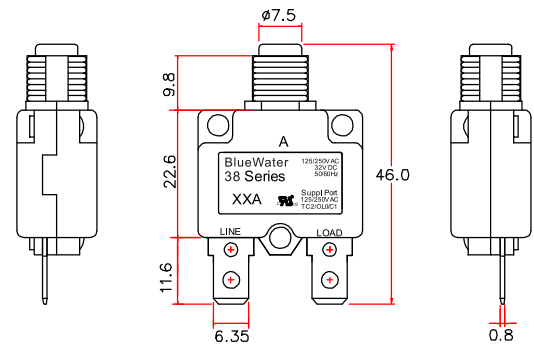


### Compliance with Rohs

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)



\* Dimension in mm:

### Typical applications

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

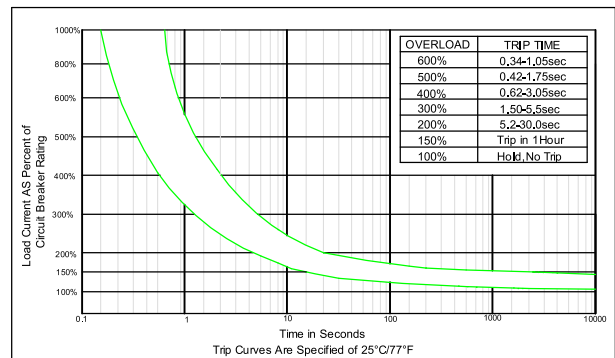
### Calibration (at 25°C)

- 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

### •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

### 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