



91 Series Thermal Circuit Breaker

Single Pole Push to Reset



•Technical data

- Current rating range 0.5~10A
- Input voltage rating 125/250VAC; 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)
- Degree of protection Terminal area IP00, operating area IP40



•Mechanical/Environmental Data

- Operating Ambient Temperature: -10°C to +60°C
- Termination: 110"(2.8mm) 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

•Typical applications

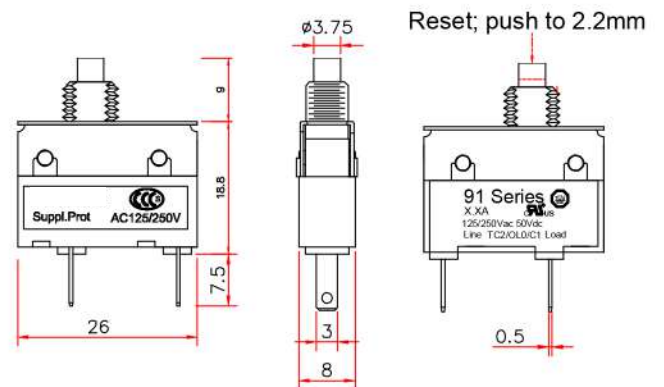
Transforms, Motors, Battery chargers, Power supplies, appliances, extra low voltage systems, machinery.

•Calibration(at25°C)

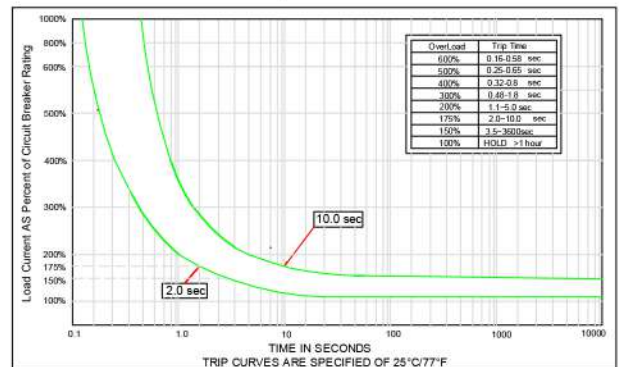
- 100% of Rated Current: Hold , No Trip
- 150% of Rated Current: Trip Within 1 Hour.
- 175% of Rated Current: 2.0-10.0 sec Trip
- 200% of Rated Current: 1.1-5.0 sec Trip

•Approval

Approval & File No.	Rated current	Rated voltage
•CUL UL E155159	0.5-10.0A	125/250VAC; 50VDC
•TUV SUD B150158611006	0.5-10.0A	125/250VAC; 50VDC
•CCC 201101030752058	1.0-10.0A	125/250VAC.
•VDE 40036160	1.0-10.0A	125/250VAC.



•91 Series 0.5~10A Trip Curves

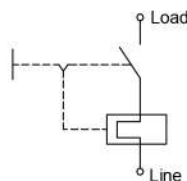


•Max.Internal Resistance

Rated current	Max.Internal Resistance
1.0A or less	400mOhms or less
1.25A or more	200mOhms or less

- <1>Rated current: 1.0A or less 400mOhms or less.
- <2>Rated current: 1.25A or more 200mOhms or less.

•Internal connection diagram



•Ambient Temperature Correction Factor

Ambient temperature	-10°C	0°C	10°C	25°C	35°C	40°C	50°C	60°C
Multiplication factor	*1.30	*1.20	*1.10	1.00	*0.94	*0.85	*0.73	*0.68

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 derating factor shown below.

Example : Normal Continuous Current = 10A
Ambient Temperature = 45°C
Multiplication Factor = 0.85
Recommended Rating= 10A/0.85=11.8A
Select the Nearest Rating = 12A

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



TIAN RUI

Order Guide	91- Series No.	A Type of Button 按鍵規格	N Fitting Plate 固定方式	R Color of Button 按鍵顏色	- 2.5A Rating Amp 電流額定	- 0 Terminal Type 端子種類	0 Terminal Finish 端子處理
		 			0.5A 0.6A 0.7A 0.8A 1.0A 1.25A 1.4A 1.5A 1.6A 1.75A 2.0A 2.25A 2.5A 2.75A 3.0A 3.15A 3.3A 3.5A 3.75A 4.0A 4.5A 5.0A 5.5A 6.0A 6.3A 6.5A 7.0A 7.5A 8.0A 9.0A 10.0A		
		<p>N type</p>					
		<p>P type</p>					
		<p>T type</p>					
		<p>M type</p>					
		<p>R= Red, B= Black, V= Violet G= Gray, Y= Yellow, U= Blue, O= Orange,</p>					
		<p>0 type</p>	<p>2 type</p>			<p>Y type</p>	
		<p>L type</p>	<p>B type</p>			<p>4 type</p>	
		<p>0= Plate with Tin, N= Plate with Nickel</p>					

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