

# TR11 Series

## UL1077 Recognized Supplementary Protector/ Circuit Breaker for Equipment



E209569



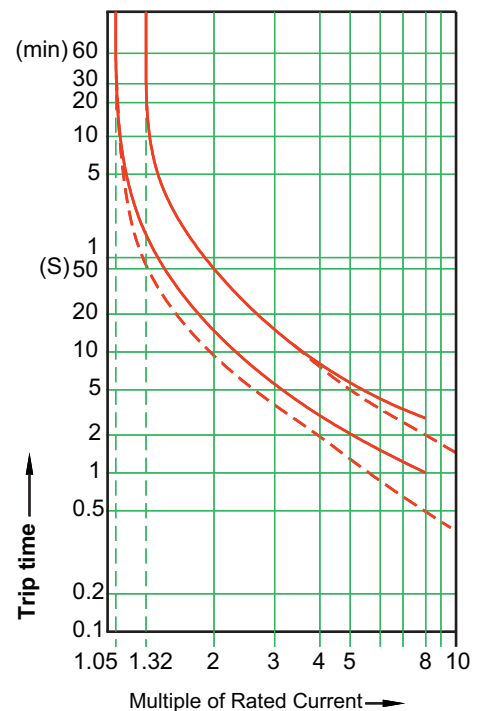
up to 12 Amps

### Applications:

Protection of Control Transformers, UPS, Power strips, Solenoids etc., against damage due to overload conditions.

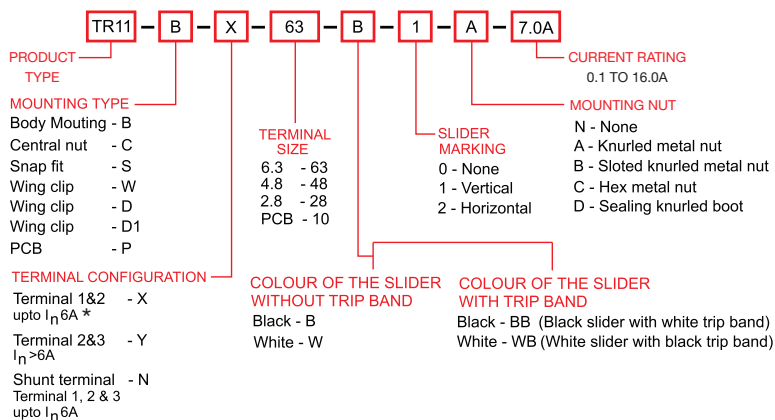
Current Rating (A)	0.1 - 16A
Standard Current Rating (A)	0.1, 0.25, 0.5, 0.9, 1.0, 1.2, 1.5, 1.8, 2.0, 2.2, 2.5, 2.7, 3.0, 3.3, 4.0, 5.0, 6.0, 6.5, 7.0, 8.0, 9.0, 10.0, 12.0, 15.0, 16.0
Rated Voltage	240V AC, 50/60Hz, 50V DC / 24V DC (VDE)
Initial insulation resistance (500V DC)	> 100 M ohms. (As per EN 60934)
Dielectric strength	1.5 KV for One minute. (As per EN 60934)
Overload Switching Capacity	6 I <sub>n</sub> - AC up to 9.0A 4 I <sub>n</sub> - DC up to 12.0A (As per EN 60934) 60A AC/DC Max. - from 10.0A to 12.0A
Maximum Breaking Capacity	8x I <sub>n</sub> AC/DC for <6.0A 60A AC/DC MAX. for > 6.0A
Power Loss	1 - 2 Watts
Operating Temperature	Maximum 60°C Ambient
Operational Life at 2xI <sub>n</sub>	1000 Cycles
Rated Conditional Short Circuit Current Capacity I <sub>nc1</sub> (PC1)	1000 Amps PC 1, 240V AC, 24V DC, Ref.: EN60934 SC: 1KA, C1, 240V AC 50V DC Ref.: CSA22.2 No.235-04, UL-1077
Tripping Current Code TC	TC 2 Ref.: CSA22.2 No. 235-04
Overload Rating	OL0 240V AC, 50V DC, Ref.: CSA22.2 No. 235-04
Application Type	General Industrial Ref.: CSA22.2 No. 235-04
Method of Tripping	Thermal 'TO' Trip Free
Type of Actuation	Reset Type 'R'
Application Standards	CSA 22.2 No. 235-04, UL-1077, EN 60934
Weight	approx. 11g
Approvals	0.1 - 16.0A 240V AC 50V DC          0.5 - 12.0A 240V AC 24V DC

### Operating Characteristic



Rated current < 6 A  
 - - - - - Ambient >= 6 A  
 Temperature 23°C

### ORDERING INSTRUCTIONS



\* Terminal configuration option X is available up to 12A; special order only. Consult Altech for ordering.

### Time Current Characteristics:

The standard characteristic is valid for ambient temperatures of +23°C. If the device is to be used in an ambient temperature other than +23°C, allowances must be made when selecting the current rating according to the following guidelines:

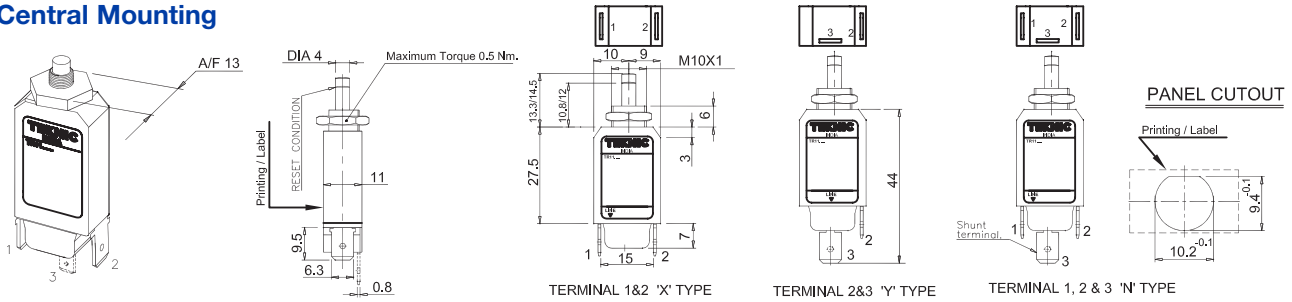
Ambient temp.°C	-20	-5	0	+10	+20	+30	+40	+50	+60
Correction Factor	0.8	0.88	0.9	0.96	1	1.05	1.12	1.2	1.3

Example:	Normal Continuous Current	1.8A
	Ambient Temperature	40°C
	Correction Factor	1.12
	Recommended Current Rating	1.8 x 1.12 = 2.016
	Select the nearest	2.0A

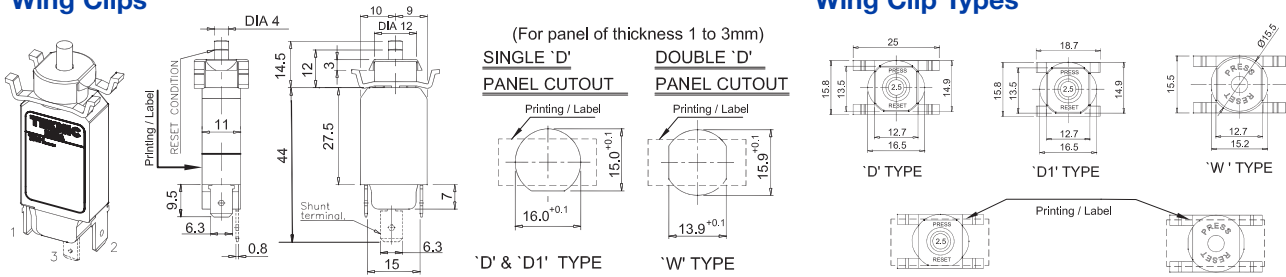
Note: TR11-C Series stocked; contact Altech for availability.

# TR-11 Dimensions & Mounting Options

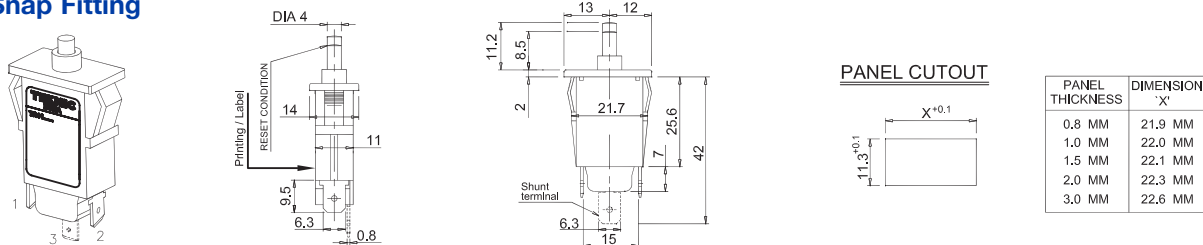
## Central Mounting



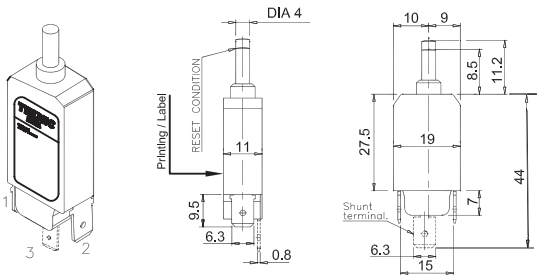
## Wing Clips



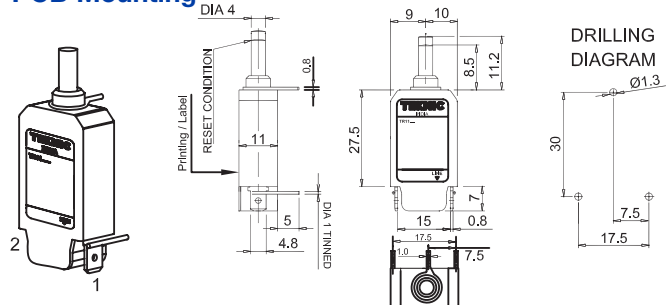
## Snap Fitting



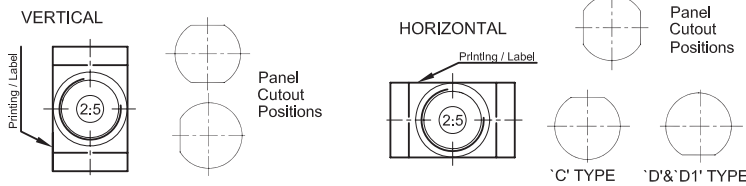
## Body Mounting



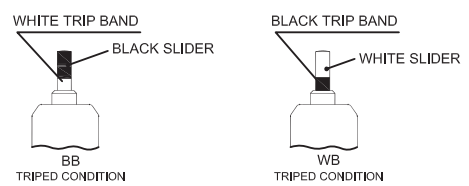
## PCB Mounting



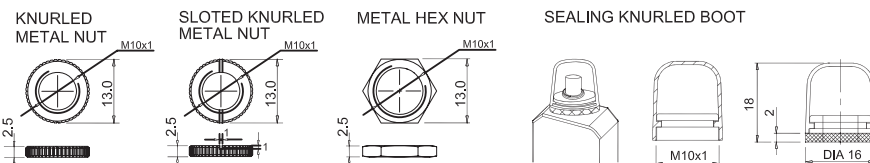
## Slider Printing for Current Rating



## Slider Color with Trip Band



## Accessories



Dimensions in mm (to convert to inches multiply by 0.03937)

A sealing boot for central mounting Type (C) Circuit breaker to provide dust & splash protection (IP 54).

UL 489

UL 508

UL 1077

UL 1077  
Equipment Breakers

Earth Leakage  
Circuit Breakers

ANNEX