

# TR11 Series



up to 12 Amps

## UL1077 Recognized Supplementary Protector/ Circuit Breaker for Equipment

### Applications:

Protection of single phase Motors, Transformers, UPS, Power strips, Solenoids etc., against damage due to overcurrent conditions.



|                                      |  |
|--------------------------------------|--|
| Current Rating                       | 0.5 - 16.0A  |
| Rated Voltage                        | 240V AC, 50/60Hz, 32V DC / 24V DC (VDE)  |
| Initial insulation resistance        | > 100 M ohms. (As per EN 60934)  |
| Dielectric strength                  | 1.5 KV for One minute. (As per EN 60934)<br>6 I <sub>n</sub> ~ up to 9.0A  |
| Overload Switching Capacity          | 4 I <sub>n</sub> - up to 12.0A (As per EN 60934)<br>60A Max. ~ from 10.0A to 12.0A<br>60A Max. - from 10.0A to 12.0A |
| Maximum Breaking Capacity            | 8x I <sub>n</sub> for <6.0A<br>60A MAX. for ≥ 6.0A   |
| Power Loss                           | 1 - 2 Watts  |
| Operating Temperature                | Maximum 60°C Ambient   |
| Operational Life at 2xI <sub>n</sub> | 1000 Cycles  |
| Limited short circuit current        | 1000 Amps PC 1   |
| Terminals                            | 0.25" Quick connect  |
| Applicable Standards                 | EN 60934, CSA 22.2 No. 235, UL-1077  |
| Approvals                            | up to 16.0 A  upto 12.0A   |
| Accessories                          | Dust Cover, DC-TR11 C (see page 14)  |

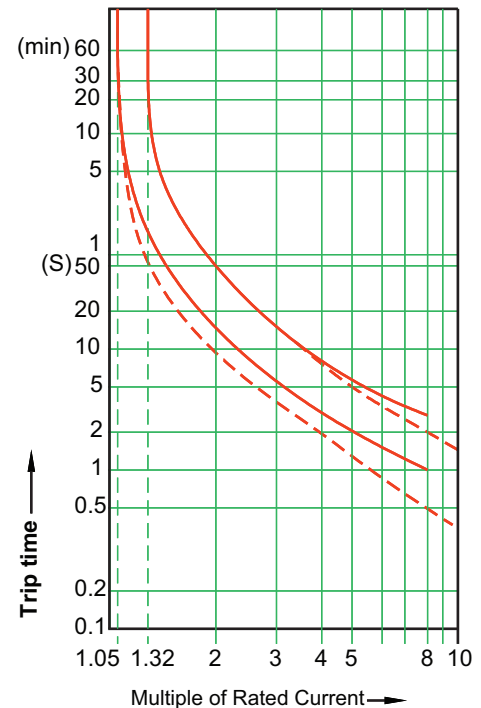
### Time Current Characteristics:

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

## Operating Characteristic



— Rated current < 6 A  
- - - Rated current ≥ 6 A  
 Ambient Temperature 23°C

# TR-11 Characteristics & Mounting Options

**Application Examples:**

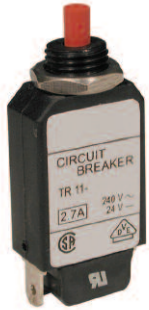
Protection of single phase Motors, Transformers, UPS, Power strips, Solenoids etc., against damage due to overcurrent conditions.



E209569



up to 12 Amps



**Central Mounting**

Standard Pack: 10

Weight: 0.27kg (0.6 lb.)

| Rated Current | Type/Cat. No. |
|---------------|---------------|
| 0.5A          | TR-11CX630.5A |
| 0.9A          | TR-11CX630.9A |
| 1.0A          | TR-11CX631A   |
| 1.2A          | TR-11CX631.2A |
| 1.5A          | TR-11CX631.5A |
| 1.8A          | TR-11CX631.8A |
| 2.0A          | TR-11CX632A   |
| 2.2A          | TR-11CX632.2A |
| 2.5A          | TR-11CX632.5A |
| 2.7A          | TR-11CX632.7A |
| 3A            | TR-11CX633A   |
| 3.3A          | TR-11CX633.3A |
| 4A            | TR-11CX634A   |
| 5A            | TR-11CX635A   |
| 6A            | TR-11CX636A   |
| 6.5A          | TR-11CY636.5A |
| 7A            | TR-11CY637A   |
| 8A            | TR-11CY638A   |
| 9A            | TR-11CY639A   |
| 10A           | TR-11CY6310A  |
| 12A           | TR-11CY6312A  |
| 15A           | TR-11CY6315A  |
| 16A           | TR-11CY6316A  |

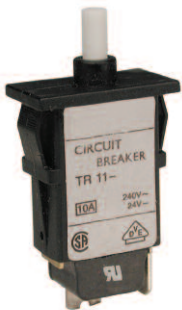


**Wing Clips\***

Standard Pack: 10

Weight: 0.27kg (0.6 lb.)

| Rated Current | Type/Cat. No. |
|---------------|---------------|
| 0.5A          | TR-11WX630.5A |
| 0.9A          | TR-11WX630.9A |
| 1.0A          | TR-11WX631A   |
| 1.2A          | TR-11WX631.2A |
| 1.5A          | TR-11WX631.5A |
| 1.8A          | TR-11WX631.8A |
| 2.0A          | TR-11WX632A   |
| 2.2A          | TR-11WX632.2A |
| 2.5A          | TR-11WX632.5A |
| 2.7A          | TR-11WX632.7A |
| 3A            | TR-11WX633A   |
| 3.3A          | TR-11WX633.3A |
| 4A            | TR-11WX634A   |
| 5A            | TR-11WX635A   |
| 6A            | TR-11WX636A   |
| 6.5A          | TR-11WY636.5A |
| 7A            | TR-11WY637A   |
| 8A            | TR-11WY638A   |
| 9A            | TR-11WY639A   |
| 10A           | TR-11WY6310A  |
| 12A           | TR-11WY6312A  |
| 15A           | TR-11WY6315A  |
| 16A           | TR-11WY6316A  |



**Snap Fitting\***

Standard Pack: 10

Weight: 0.27kg (0.6 lb.)

| Rated Current | Type/Cat. No. |
|---------------|---------------|
| 0.5A          | TR-11SX630.5A |
| 0.9A          | TR-11SX630.9A |
| 1.0A          | TR-11SX631A   |
| 1.2A          | TR-11SX631.2A |
| 1.5A          | TR-11SX631.5A |
| 1.8A          | TR-11SX631.8A |
| 2.0A          | TR-11SX632A   |
| 2.2A          | TR-11SX632.2A |
| 2.5A          | TR-11SX632.5A |
| 2.7A          | TR-11SX632.7A |
| 3A            | TR-11SX633A   |
| 3.3A          | TR-11SX633.3A |
| 4A            | TR-11SX634A   |
| 5A            | TR-11SX635A   |
| 6A            | TR-11SX636A   |
| 6.5A          | TR-11SY636.5A |
| 7A            | TR-11SY637A   |
| 8A            | TR-11SY638A   |
| 9A            | TR-11SY639A   |
| 10A           | TR-11SY6310A  |
| 12A           | TR-11SY6312A  |
| 15A           | TR-11SY6315A  |
| 16A           | TR-11SY6316A  |



**Integral Mounting\***

Standard Pack: 10

Weight: 0.27kg (0.6 lb.)

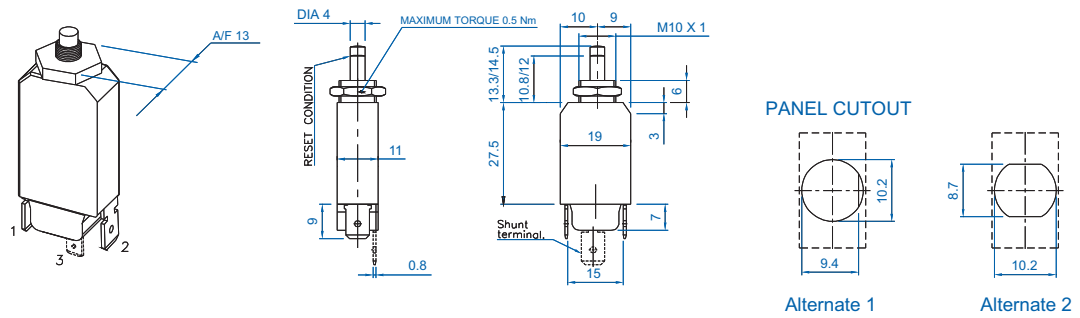
| Rated Current | Type/Cat. No. |
|---------------|---------------|
| 0.5A          | TR-11BX630.5A |
| 0.9A          | TR-11BX630.9A |
| 1.0A          | TR-11BX631A   |
| 1.2A          | TR-11BX631.2A |
| 1.5A          | TR-11BX631.5A |
| 1.8A          | TR-11BX631.8A |
| 2.0A          | TR-11BX632A   |
| 2.2A          | TR-11BX632.2A |
| 2.5A          | TR-11BX632.5A |
| 2.7A          | TR-11BX632.7A |
| 3A            | TR-11BX633A   |
| 3.3A          | TR-11BX633.3A |
| 4A            | TR-11BX634A   |
| 5A            | TR-11BX635A   |
| 6A            | TR-11BX636A   |
| 6.5A          | TR-11BY636.5A |
| 7A            | TR-11BY637A   |
| 8A            | TR-11BY638A   |
| 9A            | TR-11BY639A   |
| 10A           | TR-11BY6310A  |
| 12A           | TR-11BY6312A  |
| 15A           | TR-11BY6315A  |
| 16A           | TR-11BY6316A  |

\* SPECIAL ORDER ONLY. Contact Altech for more details.

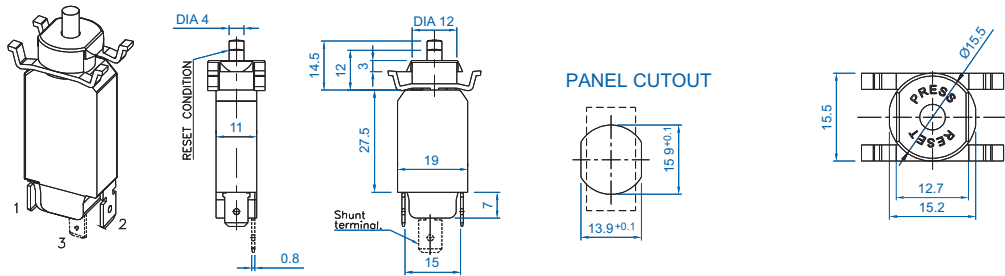
PCB Mounting and additional Shunt Terminal available, please contact Altech.

## TR-11 Dimensions & Mounting Options

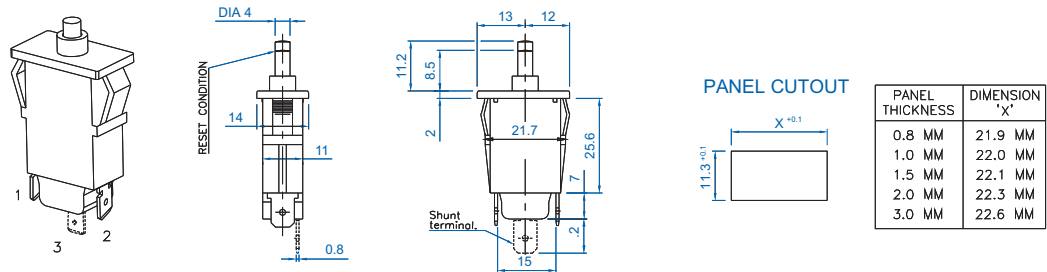
### Central Mounting



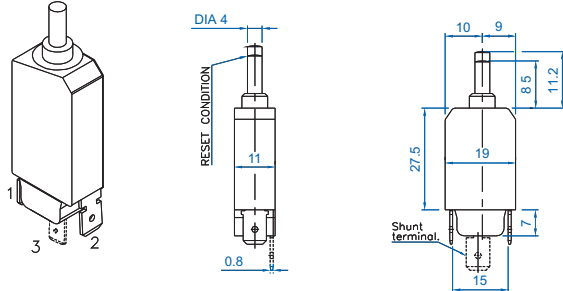
### Wing Clips



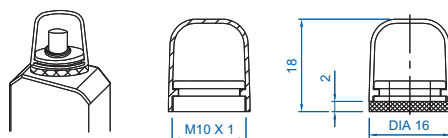
### Snap Fitting



### Integral Mounting



### Dust Cover



Cover is suitable for central mounting type circuit breaker to provide dust & splash protection (IP 54).  
Type/Cat. No.: DC TR11 C

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