

TR11 Thermal Breakers



The Techna TR11 Circuit Breaker for equipment, is a single pole push-to-reset, thermally operated Overload Protector, providing reliable, trip-free operation on overloads and short circuits, within the maximum breaking capacity specified. The latching trip mechanism maintains high contact force preventing contact bounce and reducing the risk of contact welding.

Typical applications

Main applications are the protection of single phase motors, transformers, UPS, power strips, solenoids, etc., against damage due to overcurrent conditions.

Trip characteristics

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

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

For Example:

Your circuit draws a 10A current and is operating at an ambient temperature of 50°C.

From the table above at 50°C the multiplication factor is 1.20. 10A x 1.2 = 12 so you should use a 12A breaker for a 10A load operating at 50°C.

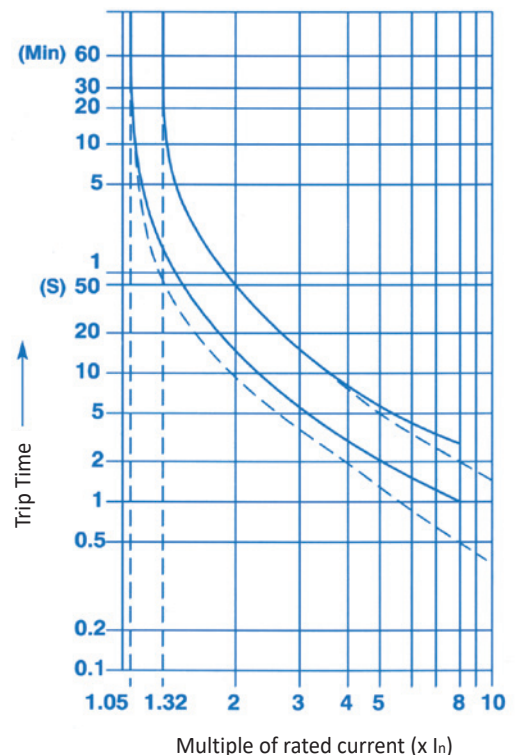
TR11 Dust Cap



Order code: TR11DC1

Rated current
 Dotted line <6A
 Solid line ≥6A
 Ambient temperature 23°C

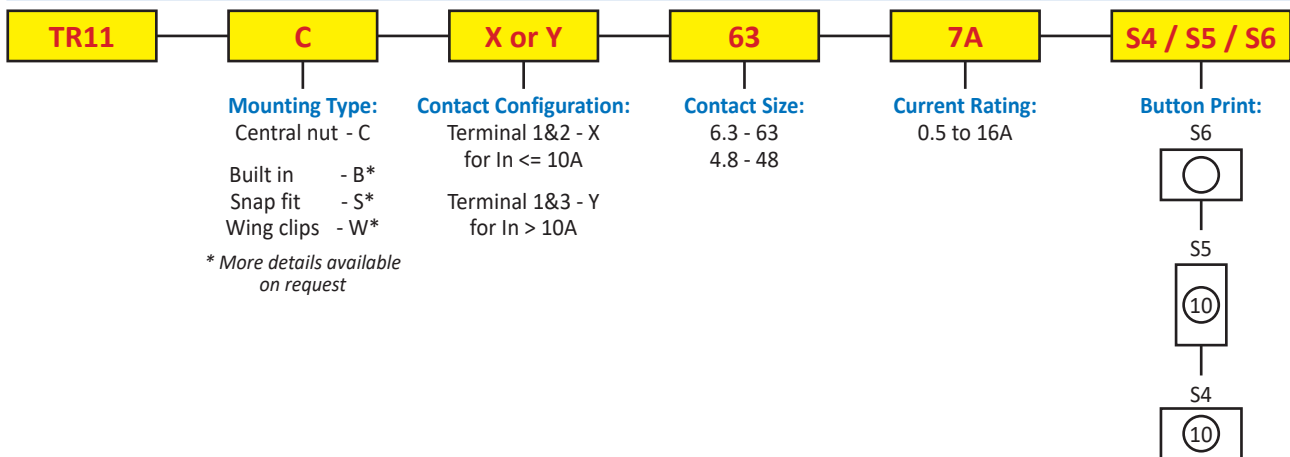
TR11 Trip Curves



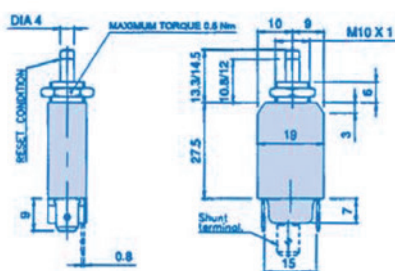
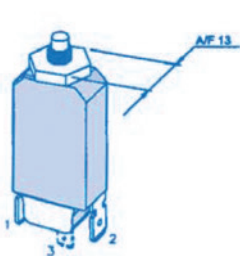
TR11 Technical Specification

Current Rating (A)	0.5, 0.9, 1.0, 1.2, 1.5, 1.8, 2, 2.2, 2.5, 2.7, 3, 3.3, 4, 5, 6, 6.5, 7, 8, 9, 10, 12, 16		
Rated Voltage	240 Vac (50/60Hz), 24 Vdc (VDE), 32 Vdc (UL, CSA)		
Initial Insulation Resistance	> 1000MΩ (as per IEC 60934)		
Di-Electric Strength	1.5 KV for one minute (as per IEC 60934)		
Overload Switching Capacity	6 x I _n for <9A AC, 4 x I _n for <12A DC, 60A for all other parts		
Maximum Breaking Capacity	8x I _n for <6A AC/DC, 60A for ≥6A AC/DC		
Conditional Short Circuit Current	1000A PC1 category as per EN 60934		
Interrupting Capacity (UL1077)	1000A, 240 Vac, 32 Vdc as per UL & CSA		
Power Loss	1 - 2 watts		
Operating Temperature	Maximum 60°C ambient		
Operational Life at 2 x I _n	1000 cycles		
Degree of Protection (IP)	IP 40 for accessible range		
Applicable Standards	IEC 60934, CSA 22.2 No. 235, UL-1077		
Certification Current / Voltage Ratings	UL & CSA	0.5A to 16A	240 Vac / 32 Vdc
	VDE	0.5A to 16A	240 Vac / 24 Vdc
Weight	10g (without nut)		
Approvals			

TR11 Ordering Scheme



TR11 Dimensional Drawing



Mounting Options CENTRAL MOUNTING

