Description

Thermal circuit breaker, with controlled self-resetting mechanism, specially suited to installation in inaccessible locations. Under overload conditions the circuit breaker contacts will open to protect the load circuit. A low current excitation circuit ensures that the contacts remain open thereby avoiding the hazards of automatic reset operation. The circuit breaker is reset by switching off the supply circuit for a short period. Class 2 device, contacts stay open until voltage is removed. Type II to SAE J 553.

Typical applications

Automotive and marine extra low voltage wiring systems and components, battery powered appliances.

1160-...

Ordering information

Type No.	
1160	single pole plug-in type
Design standard	
02	standard version 12 V
Current ratings	
12, 15, 20, 30 A	

1160 - 02 - 12A ordering example

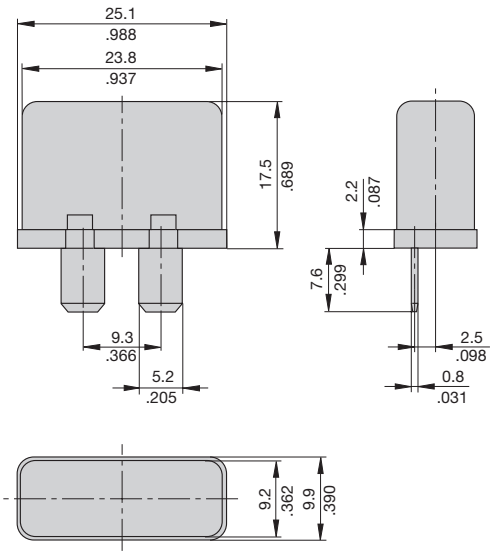
Standard current ratings and typical voltage drop values

Current rating (A)	Voltage drop (mV)
12	< 150
15	< 150
20	< 150
30	< 150

Technical data

Voltage rating	DC 12 V
Current ratings	12...30 A
Typical life	300 operations at 2 x I_N
Ambient temperature	-30...+60 °C (-22...+140 °F)
Holding current	< 0.6 A
Reset time at 23°C after 5 s of load with U_N	< 35 sec
Interrupting capacity (o-o-o)	200 A, L/R = 2.5 ms
Degree of protection (IEC 60529/DIN 40050)	housing area IP54 terminal area IP00
Vibration	5 g (57-500 Hz) ± 0.38 mm (10-57 Hz), to IEC 60068-2-6, test Fc, 10 frequency cycles/axis
Shock	25 g (11 ms) to IEC 60068-2-27, test Ea
Corrosion	96 hours at 5 % salt mist, to IEC 60068-2-11, test Ka
Humidity	240 hours at 95 % RH to IEC 60068-2-3, test Ca
Mass	approx. 6 g

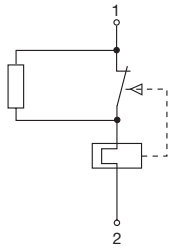
Dimensions



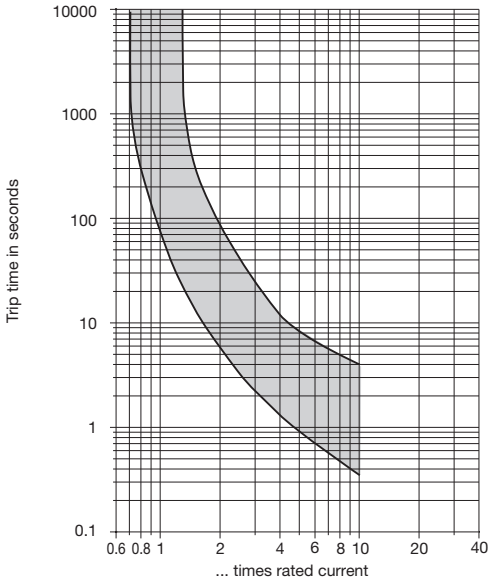
Accessories

Sockets available to special order.

Internal connection diagram



Typical time/current characteristics at +23 °C/+73.4 °F



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. See also section 9 – Technical information.

Ambient temperature °F	-4	+14	+32	+73.4	+104	+122	+140
°C	-20	-10	0	+23	+40	+50	+60
Derating factor	0.76	0.84	0.92	1	1.08	1.16	1.24

This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.Product markings may not be exactly as the ordering codes. Errors and omissions excepted.