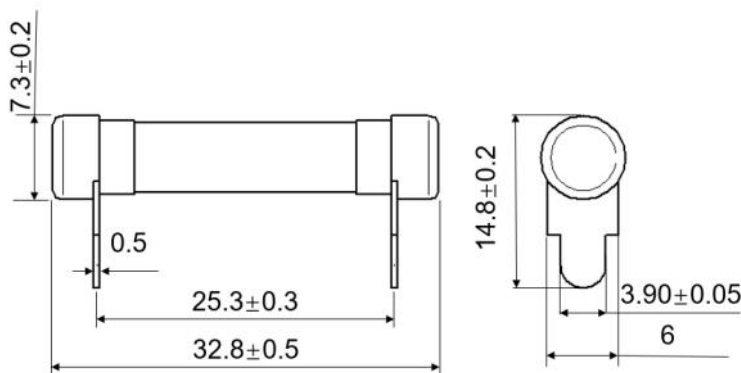
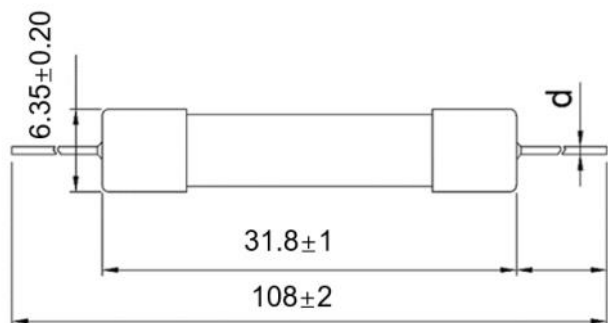




Dimensions (mm)



Rated Current	d
20 A~25 A	Φ1.00±0.05
30 A~40 A	Φ1.20±0.05

Key Features

- Ceramic.
- Body Size: Φ6.35 mm × 31.8 mm.
- High Breaking Capacity.
- RoHS and REACH Compliant, Pb-free.

Applications

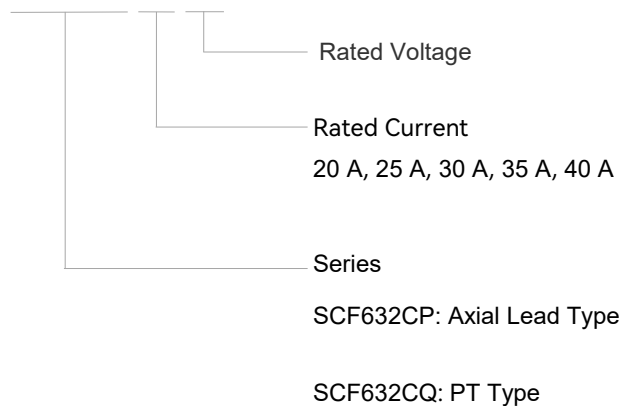
- Modular Power Supply.

Certification Information

Mark	Certificate No.
	2026010308859006
	CE260317010135
	CQC26012510631

Part Numbering System

SCF632CX40A500V

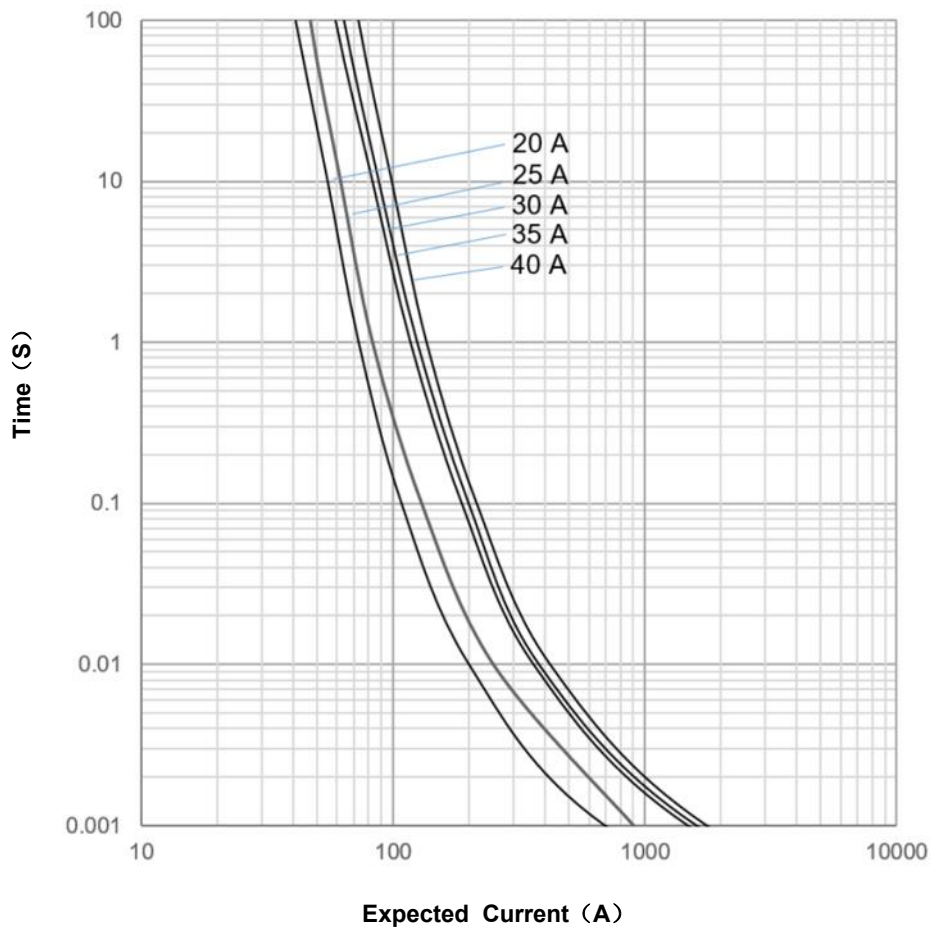


Specifications

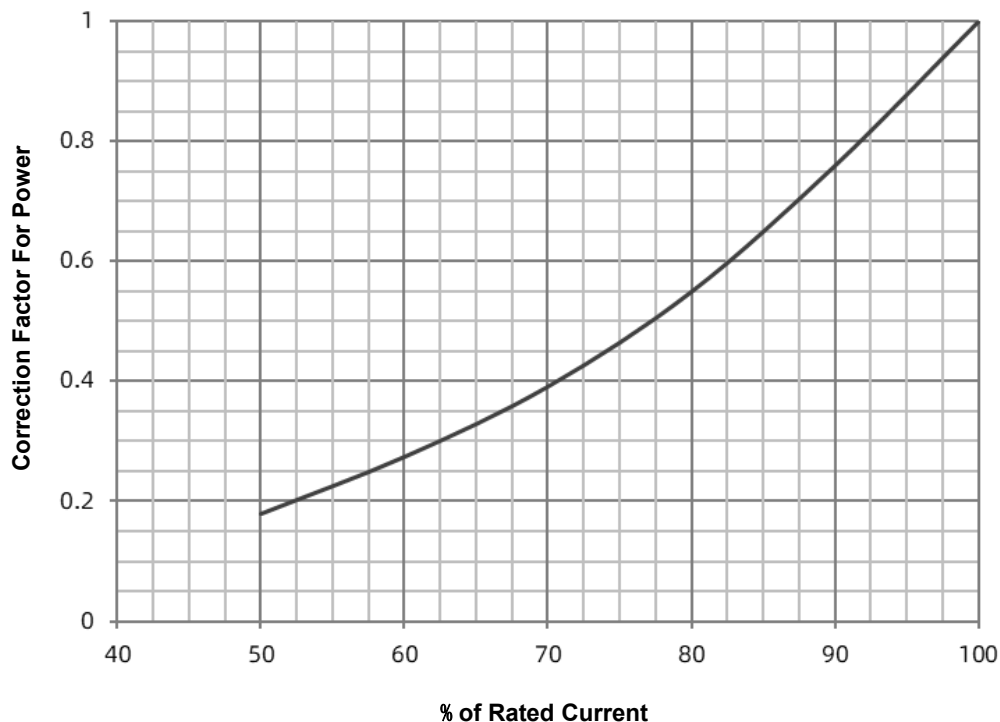
Series	Rate Current	Rated Breaking Capacity	Pre-arcing t^a	Fusing I^2t^a	Safety Approvals			Environment		
	(A)		(A ² sec)	(A ² sec)				RoHS	REACH	Pb-free
SCF632CX	20	50 kA@500 VAC 30 kA@500 VDC	220	530	●	●	●	●	●	●
SCF632CX	25		390	950	●	●	●	●	●	●
SCF632CX	30		880	2130	●	●	●	●	●	●
SCF632CX	35		1030	2500	●	●	●	●	●	●
SCF632CX	40		1200	2900	●	●	●	●	●	●

Note: 1. “●”: The product has obtained relevant certification.
 2. Compliant with RoHS, REACH directives and Pb-free.

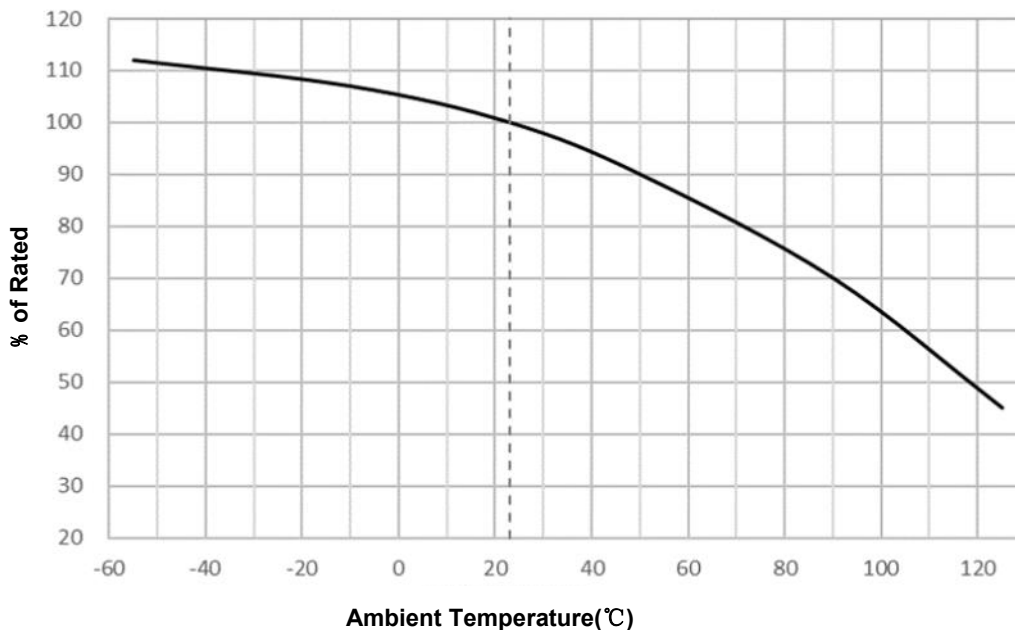
Time-Current Characteristics (For Reference Only)



Power Dissipation Curve ((For Reference Only))

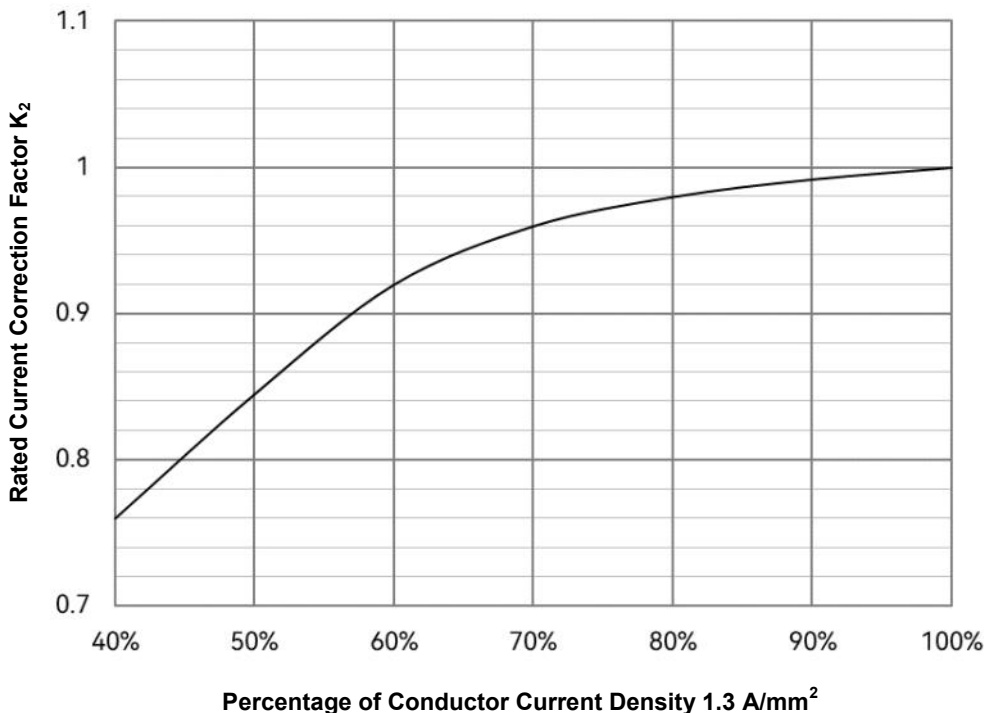


Power Dissipation Curve ((For Reference Only))



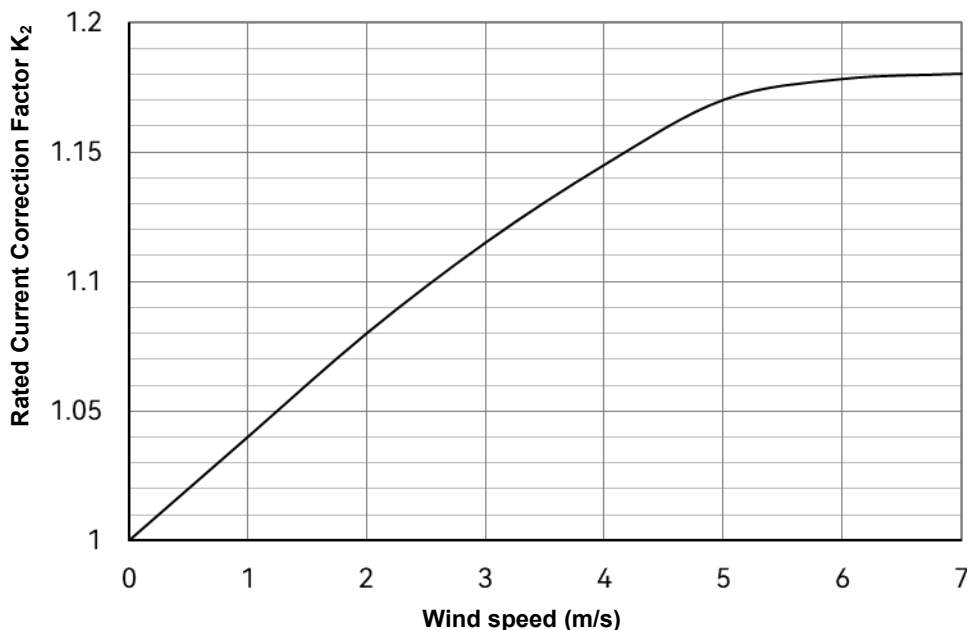
Connection Conductors (For Reference Only)

The current density of copper bar for fuse installation is suggested to be 1.3 A/mm². If the carrying current density of copper bar is greater than 1.3 A/mm², it is recommended to reduce the rated current of fuse appropriately.



Cooling Air (For Reference Only)

Rated current must be derated when the fuse operates with cooling air.



Altitude (For Reference Only)

Altitude	Rated Current Derating Factor K_4
< 2000	1.000
2500	0.975
3000	0.950
3500	0.925
4000	0.900
4500	0.875
5000	0.850

For altitude>200m (h=actual altitude in meters) : $K_4 = (1 - \frac{h-2000}{100} \times 0.005)$

Rated Current :

$$I_n \geq \frac{K_0 I_c}{K_1 K_2 K_3 K_4 K_5 K_6}$$

I_c — Long-term continuous operating current

K_1 — Ambient temperature derating factor

K_3 — Cooling air derating factor

K_5 — Enclosure derating factor (0.9–0.95 for good ventilation; 0.8 for poor ventilation)

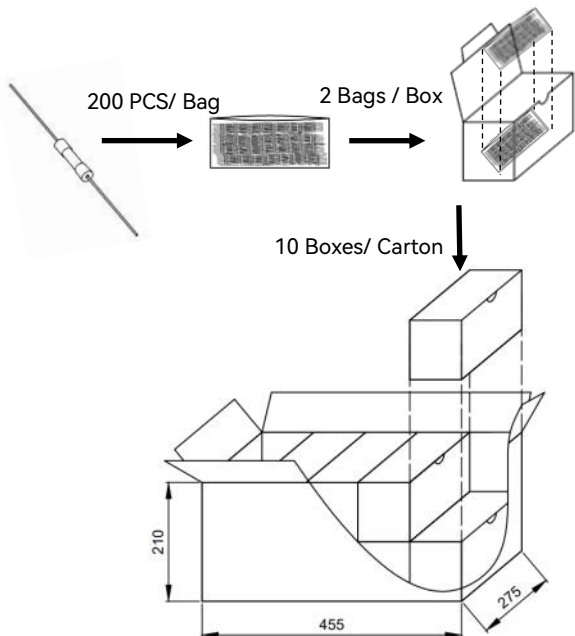
K_6 — Parallel operation derating factor (0.9 for 2–4 pcs; 0.8 for >4 pcs) Packaging Information

K_0 — Reliability factor = 1.2 (per DL/T 5044-2014)

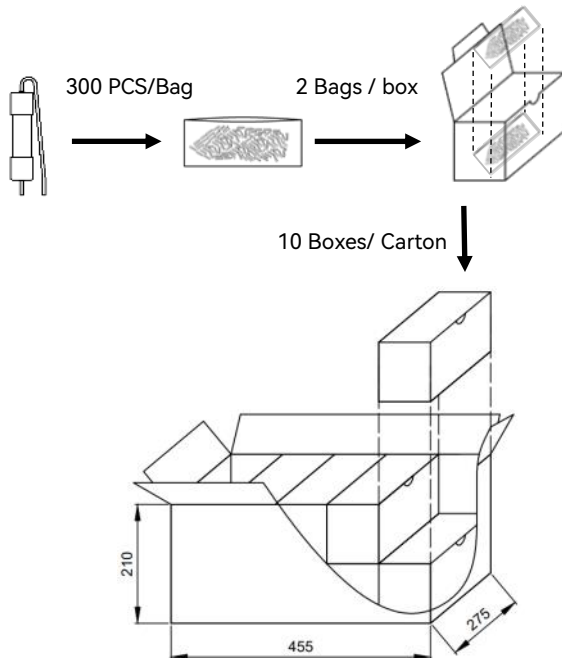
K_2 — Conductor derating factor

K_4 — Altitude derating factor

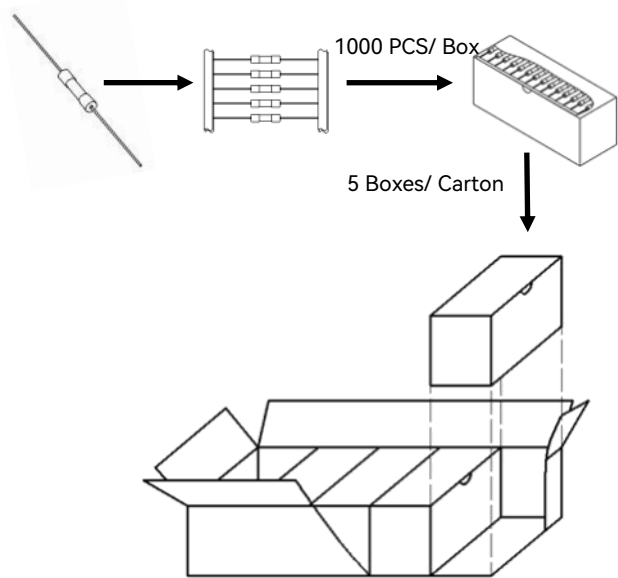
Packaging Information



Leaded type			
Item	PE bag	Box	carton
PCS	200	400	4,000
Gross weight (kg)	13.5×(1±10%)		



Formed & Cut Lead Type			
Item	PE bag	Box	Carton
PCS	300	600	6,000
Gross weight (kg)	19×(1±10%)		



Taped Type		
Item	PE bag	carton
PCS	1,000	5,000
Gross weight (kg)	16×(1±10%)	



Important Notes

Operation

- a. Do not touch the fuse body or terminals while energized; risk of burns or electric shock.
- b. Operating pressure: 80 kPa – 106 kPa (altitude: –50 m to + 2000 m).

Replacement

The fuses is a no-replaceable product, for safety reasons ,please Ensure that the spare fuse is the same model.

Storage

Fuse shall be stored away from high temperature, high humidity, Direct sunlight and corrosive gases to avoid impairing the solderability of pins. The product shall be used with in 12 months after purchase.

Installation

Mechanical Stress: No mechanical stress shall be applied to the fuse Body during and after installation.

Installation Position

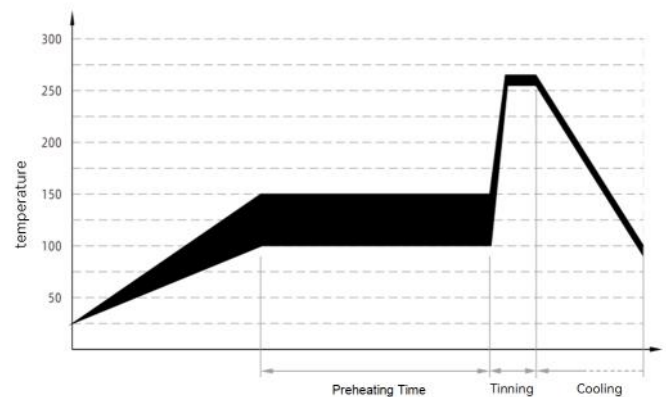
Do not install the fuse on an assembly that may often subject to Severe continuous vibration or corrosive gases (NH₃, SO₂, Cl₂, etc.).

Storage Conditions and Effective Date

- Storage temperature: –10 °C~40 °C.
- Storage humidity: ≤75% RH.
- Sealed in a place with no sunshine no pollution and without corrosive gases(NH₃, SO₂, Cl₂, etc.).
- Validity period: 12 consecutive months after you receive it.

Soldering Parameters

Wave Soldering (For Reference Only)



Item	Temperature (°C)	Time (s)
Preheating	100 - 150	60 - 180
Soldering	255 - 265	4 - 8

Hand Soldering

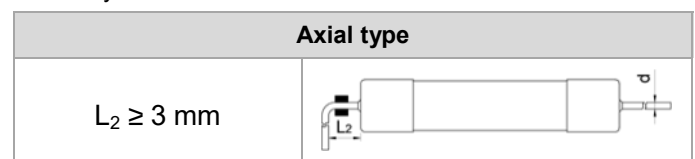
Soldering iron temperature: (350 ± 5) °C.

Soldering time: ≤ 5 s.

Lead Bending

Keep bending point at least 3 mm away from the fuse body.

Glossary:



Glossary

Item	Description
Fuse	Device that by the fusing of one or more of its specially designed and proportioned components opens the circuit in which it is inserted by breaking the current when this exceeds a given value for a sufficient time. —(IEC 60127)
Fast-acting Fuse	A type of fuse that can open the circuit quickly under overload and short-circuit conditions. This type of fuse cannot withstand some overload inrush currents. UL-certified or recognized fast-acting fuses typically open within 5 seconds at 200% to 250% of the rated current. There are two types of fast-acting fuses under IEC standards: <ul style="list-style-type: none"> ● F indicates fast-acting: can open within 0.001 s to 0.01 s at 10 times the rated current. ● FF indicates very fast-acting: can open within 0.001 s at 10 times the rated current. —(UL 248)
Time-delay fuse	A type of fuse with built-in time delay that allows temporary, harmless inrush currents to pass without tripping. The opening time under sustained overload and short-circuit conditions during design should be: UL-certified or recognized time-delay fuses will open within 2 minutes at 200% to 250% of the rated current. There are two types of time-delay fuses under IEC standards: <ul style="list-style-type: none"> ● T indicates time-delay: can open within 0.01 s to 0.3 s at 10 times the rated current. ● TT indicates long time-delay: can open within 0.1 s to 1 s at 10 times the rated current. —(UL 248)
Rated Current I_N	The rated current of a fuse is determined based on its current carrying capacity under controlled test Conditions. Each fuse shall be marked with a rated current, which may be a number, letter, or color code. —(IEC 60127)
Rated Voltage U_N	Current that would flow in the circuit if each pole of the fuse were replaced by conductor of negligible impedance —(IEC 60127)
Nominal Melting I^2t	The melting, arcing, or clearing integral of a fuse, termed I^2t , is the thermal energy required to melt, arc, or clear a specific current. It can be expressed as melting I^2t , arcing I^2t or the sum of them, clearing I^2t . —(IEC 60127)
Overcurrent	In a circuit, current exceeding the normal load current is called overcurrent. Overcurrent includes overload current and short-circuit current. —(UL 248)
Pre-arcing Time (Melting Time)	The time interval from the instant the current value is large enough to start melting the fuse element to the instant the arc begins to form. —(IEC 60127)
Arcing Time	The time interval from the instant the arc occurs to the instant the arc is finally extinguished. —(IEC 60127)
Operating Time (Breaking Time)	The sum of the melting time (pre-arcing time) and the arcing time. —(IEC 60127)
Breaking Capacity I_r	The value of the prospective current that a fuse can interrupt at a specified voltage under specified conditions of use and performance (RMS value for AC). —(IEC 60127)
Recovery Voltage	The voltage that appears across the terminals of a fuse after it has interrupted the current. —(IEC 60127)
Maximum Continuous Power Dissipation	The power dissipation of the fuse element measured at the maximum current rating that can be maintained for at least 1 hour (for fuse elements > 6.3A, for the time specified in the relevant standard specification sheet) under specified test conditions. —(IEC 60127)