

Ampacity

The current a conductor can carry continuously without exceeding its temperature rating. Ampacity is a function of cable size, insulation type and the conditions of use.

Ampere Rating

The continuous current capability of a fuse under defined laboratory conditions. The ampere rating is marked on each fuse. Class L fuses and E rated fuses may be loaded to 100% of their ampere rating. For all other fuses, continuous load current should not exceed 80% of the fuse ampere rating.

Available Fault Current

The maximum short circuit current that can flow in an unprotected circuit.

Bolt-In Fuse

A fuse which is intended to be bolted directly to bus bars, contact pads or fuse blocks.

Contacts

The external live parts of the fuse which provide continuity between the fuse and the balance of the circuit. Also referred to as ferrules, blades or terminals.

Coordination

The use of overcurrent protective devices which will isolate only that portion of an electrical system which has been overloaded or faulted.

Current-Limiting Fuse

A fuse which will limit both the magnitude and duration of current flow under short circuit conditions.

Current-Limiting Range

The available fault currents a fuse will clear in less than ½ cycle, thus limiting the actual magnitude of current flow.

Dual Element Fuse

Often confused with time delay, dual element is a term describing fuse element construction. A fuse having two current responsive elements in series.

Element

A calibrated conductor inside a fuse which melts when subjected to excessive current. The element is enclosed by the fuse body and may be surrounded by an arc-quenching medium such as silica sand. The element is sometimes referred to as a link.

Fault

An accidental condition in which a current path becomes available which by-passes the connected load.

Fault Current

The amount of current flowing in a faulted circuit.

Fuse

An overcurrent protective device containing a calibrated current carrying member which melts and opens a circuit under specified overcurrent conditions.

Interrupting Rating (abbreviated I.R.)

The maximum current a fuse can safely interrupt. Some special purpose fuses may also have a "minimum interrupting rating". This defines the minimum current that a fuse can safely interrupt.

Kiloamperes (abbreviated kA)

1,000 amperes

Limiter or Back-up Fuse

A special purpose fuse which is intended to provide short circuit protection only.

Overcurrent

Any current in excess of the conductor ampacity or equipment continuous current rating.

Overload

The operation of conductors or equipment at a current level that will cause damage if allowed to persist.

Short Circuit

Excessive current flow caused by insulation breakdown or wiring error.

Time Delay Fuse

A fuse which will carry an overcurrent of a specified magnitude for a minimum specified time without opening. The specified current and time requirements are defined in the UL/CSA/NOM 248 fuse standards.

Voltage Rating

The maximum voltage at which a fuse is designed to operate. Voltage ratings are assumed to be for AC unless specifically labeled as DC.