Fuse Safety Standards

FUSE STANDARDS / SAFETY AGENCIES

All of the Fuse Series in this catalog carry third party certification, usually by two or more safety organizations.

IEC127 - MINIATURE FUSES

This International Electrotechnical Commission Standard is divided into 10 parts, containing construction and test requirements for miniature and sub-miniature (micro) fuses. While the IEC does not evaluate, test or "approve" fuses, the IEC127 Standard forms the basis for evaluations carried out by European safety agencies.

- Ⓢ - SEMKO (Sweden)
- - VDE (Germany)
- - IMQ (Italy)

Fuses having these approvals comply fully with the applicable requirements in IEC127, and are generally accepted throughout Europe by safety agencies evaluating end products employing them.

Additionally, both UL - Underwriters Laboratories Inc. (U.S.A.) and CSA - Canadian Standards Association (Canada) will evaluate fuses to the IEC127 requirements. Such fuses are then eligible to carry the Component Acceptance marks and of these organizations.

Increasingly, fuses carrying safety approvals have been accepted in many North American applications by UL and CSA. This allows users the convenience of using the same fuse in products sold throughout the world.

UL / CSA 248 - HARMONIZED NORTH AMERICAN STANDARD

The requirements for miniature and micro fuses are contained in UL/CSA248, Parts 1 and 14, which took effect Oct. 1, 1994. Fuses which fully comply with ALL the applicable requirements are eligible for Listing and Certification.

Additionally, under the Component Programs of both UL and CSA, it is possible to have fuses evaluated with respect to only a portion of the applicable requirements; or to different parameters than those specified. These programs allow fuses to be designed (and approved) for specific applications having special protection requirements that fall outside normal UL/CSA248 specifications. Such component approvals carry and safety logos.

ELECTRICAL APPLIANCE and MATERIAL CONTROL LAW - JAPAN

Fuses which comply with the applicable requirements are eligible to carry the PSE mark, which is required for fuses used in products which are sold in Japan.

CE - EUROPEAN COMMUNITY

All of the fuses in this catalog fall under the "Low Voltage Directive" and comply with :

EC Directive no. 73/23/EEC dated Feb. 19,1973, modified by the Directive no. 93/68/EEC , dated July 22, 1993.

The smallest package of all fuses in this catalog carries the CE logo. This marking is mandatory to sell/ship product into and within the European Community.

CCC - CHINA COMPULSORY CERTIFICATION MARK

The CCC certification system was implemented May 1, 2002. This certification scheme supercedes the earlier CCIB and CCEE schemes.

CCC certification is mandatory for fuses used in all products sold in China. The safety standard used to establish the CCC certifications is GB 9364, which is derived from the IEC 127 Fuse Standards. At the present time, only fuses that comply with GB9364/IEC127 are eligible for the CCC mark. This leaves many fuse types designed to and Listed under the UL/CSA 248 fuse standards unable to bear the CCC mark.