

Standard certification mark

What is UL/CSA/cUL?

1. UL (Underwriters Laboratories Inc.)

UL was established as a nonprofit agency to protect the body, the life, and the property from dangerous electric appliances etc. in 1894. Presently, research, inspection, and test are carried out in broad range of areas, including disaster prevention equipment, electric products, parts, materials, etc., to issue standards and certify products.

In an American central government, the safety restriction of an electric product is not enacted, and the authority to enact the safety restriction is given to each state government. However, UL is admitted in most of the state governments or autonomous bodies of states, and the service of UL is used to prove the safety of the product in state governments or autonomous bodies. It can therefore be said that the UL recognition of an electric product is mandatory for export to the United States. From UL, our company has received the services of Listing, which generally refers to the certification of end products (targets products including STO, MTW, THHW, TC, CL2, CL3X, CM, CMX, etc.) and Recognition, which refers to the certification of the parts to be incorporated into products (target products including AWM 2501, 2464, etc.).

2. CSA (Canadian Standards Association)

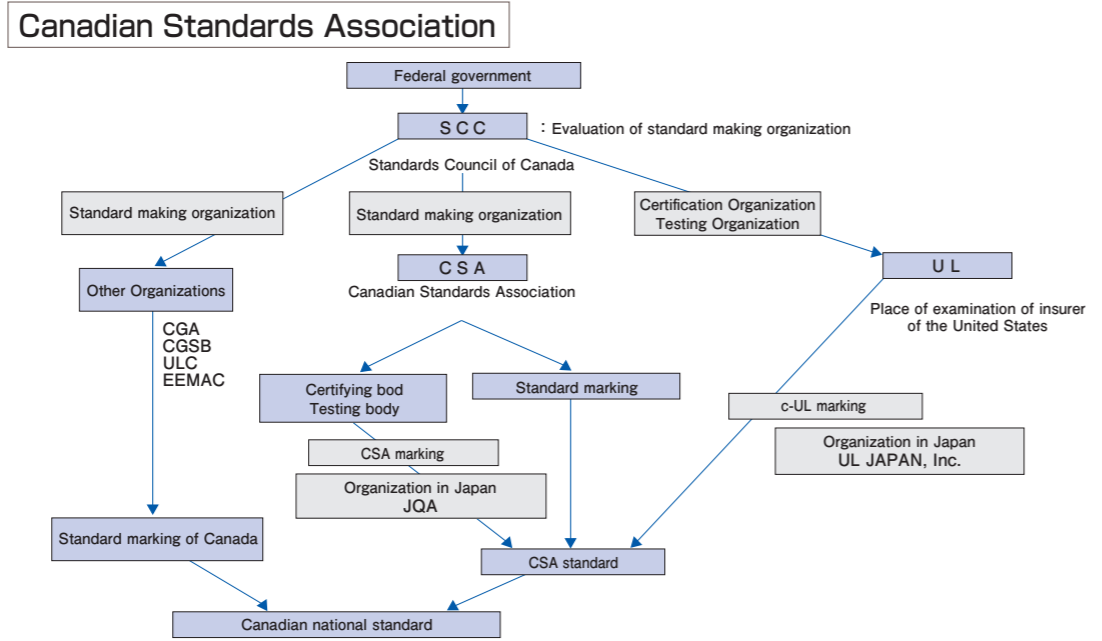
CSA was established as a nonprofit agency in cooperation with the government and the industrial world in 1919.

Like UL, the compliance with the CSA Standards is mandatory as a condition for the export of products to Canada. Some parts are common between the UL Standards and the CSA Standards, but there are some different points, depending on the target product. This means that there may be differences in character between the CSA standard upon which many opinions of government agencies are reflected and the UL standard upon which many opinions of the industrial world are reflected.

In recent years, however, both UL and CSA have frequently been exchanged with each other, and a tendency is observed to harmonize the standards as much as possible.

3. cUL

cUL means an operation via UL to carry out the test, certification, and quality examination registration of products for Canada. UL has received a certification from the Standards Council of Canada (SCC) as a certification organization (CO) and testing organization (TO). In addition, it is currently recognized officially from all the states and all Territories. We employ two cUL marks for Canada. If a product (flexible code) is subject to a listing mark in the U.S., the listing mark is also applied to the product for Canada. If a product (AWM) is subject to a recognition mark in the U.S., the recognition mark is also applied to the product for Canada. UL mark is applied to both the cUL for Canada and the existing UL mark for the U.S. The cUL mark is given to the products judged to comply with the CSA Standards through the test performed according to the standards, while the existing UL mark is given to the products judged to comply with the UL Standards through the test performed according to the standards. The difference from the CSA mark depends on whether the certification organization is CSA or UL, and both the tests are performed according to the CSA Standards.



Comparison between CSA and c-UL

- ① The suited safety standard is the same.
- ② The test, certification, and examination registration are different. CSA-CSA-JQA/c-UL-UL, UL JAPAN, Inc.
- ③ The certification mark and surface display are different due to the difference in ②. (Refer to the surface display in each series.)

Display	Registration	Suited standard
CSA marking	CSA	CSA standard
c-UL marking	UL	CSA standard

About the product received certification of TÜV

1. What is TÜV?

TÜV (technological inspection society) is an official inspecting agency of the German government and exists in various regions of Germany, such as TÜV Rheinland and TÜV Bavaria. Almost all the public groups, e.g., German governments, perform inspections via TÜV.

TÜV has characteristics as an independent third party inspecting organization, and its strictness of the inspection operation and the staff's high technical level are famous not only in the EU region but also globally.

Our international standard series has received a certification from TÜV Rheinland Japan Ltd., which is a subsidiary company of TÜV Rheinland.

2. Certification of TÜV Rheinland Japan Ltd.

Like CE marking, a target product can receive its product certification if the product safety is proved by performing the inspection and examination according to EN50525-1 (requirements of electric wire cable). (Some core numbers and sizes are not certified because some international standard series do not have applicable safety standards.)

The factory audit is also carried out as to whether manufacturing process of target products satisfies the standards. The factory certification can be received if no problem is found in this audit performed based on the ISO9000 series standard or correction measures are taken in response to a problem, if any.

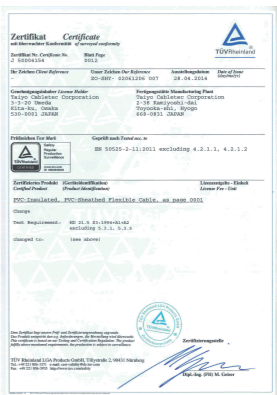
As mentioned above, the stable supply of safe products is guaranteed by performing the two certifications: inspection and examination of a target product, and the audit of quality system related to it.



Authorization certificate of Toyooka factory



Authorization certificate of Shimane factory



Authorization certificate of STO

What is the CE marking?

1. EC Directive



The EC directives are issued by the European Community (EC), classified by such fields as electric equipment, machine plant, radio interference, medical equipment, and toys, aiming at preventing the human bodies, domestic animals or properties from exposure to danger. Of the directives, the Low Voltage Directive is applicable as electric wire cable.

The target of the Low Voltage Directive is the electric equipment designed to be used in the range from 50 to 1000 VAC and 75 to 1500 VDC, and the distribution of products in the EC market requires following this directive.

The Low Voltage Directive requires not only proving the safety of a product by using the EN Standards (European Harmonized Standards), HD (Harmonized Documents), the IEC Standard (International Electrotechnical Commission), and safety standards of countries in Europe (in order of priorities), but also displaying CE marking on the product or its package.

2. Our CE marking product

For our CE marking products, the CE marking is implemented by using EN50525-1 (requirements of electric wire cable) with respect to the existing UL or cUL certified cable. (International Standard Series)

It is therefore possible to directly replace our electric wire cable that has been used for a long time.

For the CE marking product of the C3 series, the GB standard conforms to the IEC standard, and the CE marking is implemented based on EN50525-1 (requirements of the electric wire cable).

What is the Electrical Appliance and Material Safety Law?

1. Electrical Appliance and Material Safety Law



The Electrical Appliance and Material Safety Law of Japan, which the Electrical Appliance and Material Control Law was replaced with, has become effective since April 1, 2001. The purpose of the new law is "to prevent the occurrence of danger and failures that may be caused by electric appliances by controlling the manufacturing and sales of electric appliances and by promoting voluntary activities of private operators to ensure the safety of the electric appliances." That is, "prior restriction" has been changed to "post restriction" and check JECTEC (JET, etc.) by a third-party inspection organization has been incorporated to achieve the self-identification by manufacturers, importers, etc. The technical standards in the Electrical Appliance and Material Safety Law of Japan must comply with the ministerial ordinances that define the technical standards of electric appliances.

2. Electrical Appliance and Material Safety Law applied to the C3 series product (product with PSE displayed)

For our PSE mark products of C3 series, a certification has been received based on Attached Table 12 for interpretation of ministerial ordinances, which determine the technical standards of electric appliances, to carry out PSE display.

What is the CCC?



CCC is the abbreviation for China Compulsory Certification.

This is an attestation system about safety or EMC etc. of the product sold in China.

As for the product which does not acquire attestation, commercial acts, such as shipment in China, import and sale to China, are forbidden.

A duty of the display of a CCC attestation mark is imposed upon the object product.

- Products subject to certification were initially applied to 132 items of 19 categories in the "List of Products for First Compulsory Product Certification" in "Joint Announcement No.2001-33 by the General Administration of Quality Supervision, Inspection & Quarantine(AQSIQ) and the Certification & Accreditation Administration of China(CNCA)".
- Frequent additions have been announced, however, and as of September 2024, the range of items subject to the requirements includes 96 product categories in 16 groups.

1. Electrical Wires and Cables (3 categories)
2. Circuit Switching and Protection or Connection of Electrical Installations (5 categories)
3. Low-voltage Apparatus(2 categories)
4. Small Power motors (1 category)
5. Electric tools (3 categories)
6. Welding machines (4 categories)
7. Electrical Appliances for Household and Similar Purposes(19 categories)
8. Electronic Products and Safety Accessories (13 categories)
9. Lighting apparatus (2 categories)
10. Vehicle and Safety Accessories (13 categories)
11. Agricultural Machinery (2 category)
12. Fire Fighting Equipment (3 categories)
13. Building Materials(3 categories)
14. Children's products (3 categories)
15. Explosion-proof Electrical apparatus(17 category)
16. Household Gas appliances (3 categories)

- An electric wire and a cable are equivalent to 3 categories of the electric wires and cables of First Catalogue of Products Subjects to Compulsory Certification. Three categories are classifiable as follows.

- Cord sets
- Rubber insulated cables of rated voltages up to and including 450/750V
- Polyvinyl chloride (PVC) insulated cables of rated voltages up to and including 450/750V

- The CCC mark product of our company is equivalent to the polyvinyl chloride insulated cables of rated voltages up to and including 450/750V, and it obtains the attestation based on China standard GB/T 5023.1~5023.7.