# CQC

CHINA COMPULSORY CERTIFICATION

IMPLEMENTATION DETAILED-RULES

## CQC-C0302-2024

# China Compulsory Certification Implementation Detailed-Rules - Low voltage electrical components

强制性产品认证实施细则 - 低压电器 低压元器件

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# China Compulsory Certification Implementation Detailed-Rules - Low voltage electrical components

## 0 Terms and definitions

Testing at Manufacturers Premises (TMP method for short)

Engineers from a qualified designated laboratory sent by a designated certification body use the testing equipment of the factory laboratory for testing; the factory shall send testing personnel to assist. The test report shall be reviewed and approved by the relevant designated laboratory.

Witnessed Manufacturer's Testing (WMT Method)

Engineers from designated laboratories dispatched by designated certification bodies witness the factory laboratory testing conditions; the factory laboratory completes all tests using its own equipment or submits the certification body's testing plan for the factory, witnessing part of the testing conditions and testing items. Factory laboratory testing personnel are responsible for issuing original records and drafting the testing report in the prescribed format together with the witnessing designated laboratory engineer. The testing report is reviewed and approved by the relevant designated laboratory.

## 1. Scope of application

The Detailed-Rules for Low-voltage electrical components (hereinafter referred to as the Detailed-Rules) are compiled, in accordance with the requirements of the "Implementation Rules for Compulsory Product Certification Low-voltage apparatus Low-voltage components" (CNCA-C03-02:2024) (hereinafter referred to as the Implementation Rules) as a supporting document for the certification implementation rules, which is used together with the implementation rules.

The scope of products and certification basis applicable to this Detailed-Rules shall be consistent with the relevant provisions in the implementation rules; they shall be adjusted in accordance with the announcements on catalog definition and catalog adjustment, as issued by the National Certification and Accreditation Administration (hereinafter referred to as the NCAA).

CQC formulates and publishes this Detailed-Rules in accordance with the provisions of the certification implementation rules, based on the principles of maintaining the effectiveness of product certification, improving product quality, serving certified

(3) Laboratory information (when testing is required), including laboratory address, contact person and other information;

(4) The required certification process and time limit;

(5) The estimated certification fee or charging criteria;

(6) The responsibility division of the certification parties in each link of the certification implementation;

(7) The contact information of relevant CQC staff;

(8) Other matters that need to be explained.

For applications that require testing, the certification client shall submit the relevant materials to the corresponding laboratory. After completing the preliminary review of the materials, CQC will determine the test plan and notify the certification client; for applications that do not require testing, the certification client shall submit the relevant materials to CQC.

## 5.2 Certification entrustment information

After the application is accepted, the certification client shall provide relevant certification entrustment information and technical materials to CQC and/or the laboratory in accordance with the requirements of the certification scheme, which shall include:

(1) Certification application (signed by the authorized signatory and stamped with the company seal);

(2) Registration certificate of the certification client, manufacturer, production enterprise (such as business license, etc.);

(3) Factory inspection questionnaire (applicable to situations where factory inspection is required);

(4) Relevant agreements or contracts signed between the certification client, manufacturer and production enterprise;

(5) Product description information, mainly including: technical parameters, structure, model description, list of key components and/or materials, electrical schematics (if necessary), general assembly drawings (if necessary), differences between products of different specifications contained in the same certification unit, etc. (fill in according to the fixed format file provided by CQC);

(6) For change applications, supporting documents of relevant change items;

samples and fill in the sample receipt to CQC. If the laboratory has doubts about the authenticity of the samples, it shall explain the situation to CQC and make corresponding treatment.

For key components and materials within the scope of compulsory product certification purchased domestically, the manufacturer shall provide a compulsory product certification certificate.

**6.1.3 Type test inspection items**

Same as implementation rules 6.1.3. Special circumstances shall be implemented in accordance with the resolution of the TC06 expert group of the National Certification and Accreditation Administration. Specific inspection items are shown in Appendix 3 of this Detailed-Rules.

**6.1.4 Implementation of type test**

Type test time generally does not exceed 40 working days (calculated from the receipt of samples and/or inspection fees that meet the test conditions; it does not include the time taken by the enterprise to make rectifications and retests due to unqualified inspection items). When the key components of the whole machine shall be subjected to random tests, the time required for the test exceeds the test time of the whole machine; the type test time is calculated according to the longest test time of the safety components.

When some of the type test items are unqualified, the laboratory shall notify the certification client in an appropriate manner within 1 working day; report the relevant situation to the CQC. In principle, rectification and retesting shall be completed within 6 months. If this period is exceeded, the certification shall be deemed terminated.

For the case where the client applies to use the manufacturer's laboratory for testing, such as the TMP mode and the WMT mode, refer to the specific requirements in the National Certification and Accreditation Administration document "Compulsory Product Certification Implementation Rules - Utilization of Manufacturer Testing Resources and Other Certification Results" (No. CNCA-00C-004) and CQC related documents.

**6.1.5 Type test report**

Same as Implementation Rules 6.1.5.

## 6.2 Certification evaluation and decision

Same as Implementation Rules 6.2. CQC will conduct a comprehensive evaluation and review within 5 working days after receiving the complete certification materials. If the evaluation is qualified, the certificate will be approved; if the evaluation is unqualified,

the certification application will not be approved.

## 6.3 Certification time limit

Same as Implementation Rules 6.3

## 6.4 Initial factory inspection

The initial factory inspection refers to the inspection of the factory entrusted with certification before the certification is approved, including the first factory inspection, the category-expanded factory inspection (factory inspection of the expanded factory definition code), the factory inspection of different production entrustment methods, the factory inspection of certification changes (such as the relocation of the production enterprise, the standard version change, and other changes). The content of the initial factory inspection is the factory quality assurance capability inspection and product consistency inspection.

### 6.4.1 Definition of factory inspection objects and factory inspection coverage requirements

The factory definition of compulsory product certification refers to: the place where the certified products are finally assembled and/or tested and the certification mark is applied. When the above-mentioned process of the product cannot be completed in one place, a relatively complete place including at least routine inspection, affixing of product nameplate and certification mark shall be selected for inspection; the right to further inspect other places is reserved.

The factory inspection shall involve "application for certification/certified products" and all their "processing places". "Processing places" refers to all departments, sites, personnel, activities related to product certification quality; coverage of "application for certification/certified products" refers to coverage of factory quality assurance capabilities and product consistency inspections. Under a factory definition code (see Table 1), if there are products that have obtained CCC certificates and the certificate status is valid, the factory quality assurance capabilities and product consistency inspections of other similar products under this factory definition code can be covered, no repeated inspections are required. If the certification body cannot complete the factory inspection required by Appendix 1 of this document at the production site, it can extend the inspection to the certification client, manufacturer, etc.

### 6.4.3 Product consistency inspection

During the factory inspection, the products applying for certification shall be checked for consistency at the production site. The consistency check usually includes the following:

(1) Whether the product name, specification, model, necessary identification marks on the on-site products are consistent with the samples in the type test report;

(2) Whether the structure of the on-site products is consistent with the description in the type test report;

(3) Whether the suppliers of key components used in the certified products and their materials, brands, etc. are consistent with the type test report.

### 6.4.4 Inspection time

Under normal circumstances, the initial factory inspection shall be carried out after the type test is qualified. In special circumstances, the type test and factory audit can be carried out at the same time.

During the initial factory inspection, in principle, the factory shall produce products within the scope of the application for certification. The time of the initial factory inspection is determined according to the number of categories of products applied for certification, appropriately considering the production scale and distribution of the factory. Generally, each processing site is 1 ~ 5 man-days.

For certification applications that require initial factory inspection, CQC shall issue the initial factory inspection task and assign the inspector/inspection team, within 3 working days after receiving the type test report or qualified certification materials.

### 6.4.5 Inspection conclusion

In principle, the inspector/inspection team shall conduct on-site factory inspection within 10 working days; form a factory inspection report; report the inspection conclusion to the certification center. Where there are non-conformities in the factory inspection, the manufacturer shall complete the rectification within the prescribed period; CQC shall verify the rectification results in an appropriate manner. If the rectification is not completed on time, the factory inspection conclusion shall be unqualified.

## 7. Post-certification supervision

Class A enterprises can choose follow-up inspection or product sampling inspection.

## 7.1 Follow-up inspection after certification

### 7.1.1 Principles of follow-up inspection after certification

Same as Implementation Rules 7.1.1.

### 7.1.2 Contents of follow-up inspection after certification

The contents of follow-up inspection after certification are the factory quality assurance capability inspection and certified product consistency inspection. The content of the consistency inspection of certified products is the same as that of 6.4.3 of this Detailed-Rules. In addition, the use of the CCC certification mark and certification certificate shall also be checked.

## 7.2 Sampling testing or inspection at the production site

### 7.2.1 Principles of sampling testing or inspection at the production site

Same as Implementation Rules 7.2.1

### 7.2.2 Contents of sampling testing or inspection at the production site

All items specified in the standards adopted for certification inspection can be used as sampling inspection items.

The sampling activities at the production site are carried out by CQC factory inspectors.

CQC conducts inspections of some or all items based on the quality of different products and the degree of their impact on product safety performance or electromagnetic compatibility performance. Supervision sampling testing/inspection is carried out according to the supervision sampling testing/inspection plan formulated by CQC.

Note 1: In general, sampling is not implemented for products with factory definition codes of 0313 and 0314. However, sampling is implemented when the following conditions occur: 1) If the certificate is suspended due to quality reasons (factory inspection failed, supervision sampling test failed), the test items for application for restoration of the certificate are, in principle, supervision sampling testing items and test failure items; 2) If the enterprise only produces classes 0313 or 0314, or according to the requirements of Appendix 2, the number of other factory definition codes does not meet the sampling requirements, sampling is required in accordance with Appendix 2.

(4) Organize the review and determine the need for changes; implement change activities;

(5) Keep records of the implementation of his or her responsibilities.

The technical person in charge shall be a formal employee of the organization, engaged in technical work, or engaged in production, quality and other work and have the corresponding technical capabilities; be competent for the responsibilities of the technical person in charge.

The technical person in charge shall have the driving force in exercising his or her responsibilities and shall be appointed or authorized by the organization or producer (manufacturer).

In principle, the technical person in charge shall only serve in this organization and shall not concurrently serve as the technical person in charge of other organizations.

The technical director determines the applicable key components and materials and the change control method, by establishing a documented simplified process procedure.

The technical director controls, approves, and implements the changes. Keep relevant records of changes in key components and materials; transmits change information within the organization for consistency control.

The technical director must be recognized for his/her capabilities and must be re-recognized when changes occur.

**8.2.3.2 Management of the technical director by the certification body**

The qualifications of the technical director are divided according to product categories; the capabilities must be recognized separately.

The certification body is responsible for the assessment, identification, and approval of the technical director and keeps records.

The certification body is responsible for issuing identification certificates to qualified technical directors and publicizing the list of qualified personnel.

Where there are major changes in laws, regulations, rules, standards, requirements related to the certified products, the technical director must be re-identified according to the notification of the certification body.

The certification body has the right to cancel the qualifications of the technical director, who cannot perform his/her duties or cannot perform his/her duties in good faith.

# Appendix 1

**Low-voltage electrical appliances and low-voltage components - Requirements for quality assurance capabilities of compulsory certification factories**

The factory is the responsible entity for product quality; its quality assurance capabilities shall continue to meet the certification requirements. The products produced shall meet the standard requirements and ensure that the certified products are consistent with the type test samples.

## 1 Responsibilities and resources

### 1.1 Responsibilities

The factory shall define the responsibilities, authority, and interrelationships of various personnel related to the certification requirements; designate a quality manager in the management of the organization. Regardless of the responsibilities of this member in other aspects, he shall have the following responsibilities and authority:

(a) Ensure that the requirements of this document are effectively established, implemented, maintained in the factory;

(b) Ensure product consistency and product compliance with standards;

(c) Correctly use the CCC certificate and mark, to ensure that the certificate status of products with the CCC mark remains valid.

The quality manager shall have sufficient ability to perform his job; the quality manager may also serve as the certification technical manager.

### 1.2 Resources

The factory shall be equipped with necessary production equipment, inspection and testing instruments and equipment, to meet the needs of stable production of products that meet the requirements of the certification standards; it shall be equipped with appropriate human resources, to ensure that the staff engaged in activities that affect the quality of product certification have the necessary capabilities; it shall establish and maintain the necessary environment and facilities for appropriate product production, inspection and testing, storage, etc.

For external resources that need to be used in a leased manner, the factory shall ensure the continuous availability and proper use of external resources; the factory shall keep records related to external resources, such as contract agreements, usage records, etc.

## 2 Documents and records

**2.1** The factory shall establish and maintain documented procedures, to ensure effective control of the documents required by this document, necessary external documents, records. Product design standards or specifications shall not be lower than the certification basis standards of the product. For the main contents that may affect the consistency of the product, the factory shall have necessary drawings, samples, key parts lists, process documents, operating instructions and other design documents; ensure the continued validity of the documents.

**2.2** The factory shall ensure the adequacy and suitability of the documents and the valid versions of the documents used.

**2.3** The factory shall ensure that the records are clear, complete, and traceable as evidence that the product meets the specified requirements. The retention period of quality-related records shall meet the requirements of laws and regulations, ensuring that the records after the previous inspection can be obtained during this inspection, at least not less than 24 months.

**2.4** The factory shall identify and preserve important documents and quality information related to product certification, such as type test reports, factory inspection results, CCC certificate status information (valid, suspended, revoked, cancelled, etc.), certification change approval information, supervision sampling test reports, product quality complaints and handling results, etc.

## 3 Procurement and key parts control

### 3.1 Procurement control

For purchased key parts, the factory shall identify and specify their technical requirements in the procurement documents; the technical requirements shall also ensure that the final product meets the certification requirements.

The factory shall establish and maintain a list of qualified key part producers/manufacturing enterprises and purchase key parts from them. The factory shall keep records of key part procurement and use, such as purchase orders, warehousing-in and out forms, records, etc.

### 3.2 Quality control of key parts

**3.2.1** The factory shall establish and maintain documented procedures, to complete the verification and/or inspection of the technical requirements of purchased key parts, when they are received (entered into the factory); preserve relevant records.

**3.2.2** For the quality characteristics of purchased key parts, the factory shall select appropriate control methods, to ensure that the technical requirements of key parts are continuously met and that the final product meets the certification requirements; keep relevant records. Appropriate control methods may include:

The factory shall establish and maintain documented procedures, to control routine inspection and/or confirmation inspection of final products; the inspection procedures shall comply with the specified requirements; the contents of the procedures shall include inspection frequency, items, contents, methods, judgments, etc. The factory shall implement and keep relevant inspection records.

For inspections entrusted to external institutions, the factory shall ensure that the capabilities of the external institutions meet the inspection requirements and keep the evaluation results of relevant capabilities, such as laboratory accreditation certificates, etc.

## 6 Inspection and testing instruments and equipment

### 6.1 Basic requirements

The factory shall be equipped with sufficient inspection and testing instruments and equipment, to ensure that the capabilities of the instruments and equipment used in procurement, production and manufacturing, final inspection and testing, etc. meet the inspection and testing requirements for mass production of certified products.

Inspection and testing personnel shall be able to use instruments and equipment correctly, master inspection and testing requirements, implement them effectively.

### 6.2 Calibration and verification

The inspection and testing instruments and equipment used to determine whether the certified products produced meet the specified requirements shall be calibrated or verified according to the specified period. The calibration or verification period can be set according to the frequency of use of the instruments and equipment, the previous calibration status, etc. For internal calibration, the factory shall specify the calibration method, acceptance criteria, calibration period, etc. The calibration or verification shall be traceable to national or international standards. The calibration or verification status of the instruments and equipment shall be easily identifiable by users and managers. The factory shall keep the calibration or verification records of the instruments and equipment.

For calibration or verification activities entrusted to external institutions, the factory shall ensure that the capabilities of the external institutions meet the calibration or verification requirements; keep the relevant capability evaluation results.

### 6.3 Functional inspection

When necessary, the factory shall perform functional inspections on routine inspection equipment according to the specified requirements. When it is found that the functional inspection results do not meet the requirements, they shall be traceable to the products that have been tested; when necessary, these products shall be retested. The factory shall specify the measures to be taken by the operator when the instrument and equipment

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