CQC

PRODUCT SAFETY CERTIFICATION RULES

CQC11-462298-2018

Safety Certification Rules for plug, socket-outlet and couplers for industrial purposes

工业用插头插座和耦合器安全认证规则

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1. Scope of application

This Rules applies to plugs and socket-outlets, cable couplers and appliance couplers intended primarily for industrial use, for indoor or outdoor use, with a rated working voltage not exceeding 1000V d.c. or a.c. and 500Hz a.c. and a rated current not exceeding 800A.

This Rules applies to electrical accessories with a rated current not exceeding 32A in series I and a rated current not exceeding 30A in series II, and with screwless terminals or insulation piercing terminals.

Socket-outlets or appliance inlets installed in or fixed to electrical equipment are covered by this Rules. This Rules also applies to electrical accessories intended for use in extra-low voltage installations.

This Rules does not apply to electrical accessories that are primarily intended for home use or similar general purposes.

2. Certification mode

The mode for safety certification of plugs, socket-outlets and couplers for industrial use are Product type test + Initial factory inspection + Post-certification supervision.

The basic steps of certification include:

a) Application for certification

b) Type test

c) Initial factory inspection

d) Evaluation and approval of certification results

e) Post-certification supervision.

3. Application for certification

3.1 Division of certification units

Apply for certification according to the certification unit, which is generally divided as follows:

a) Application units shall be divided according to product type, current, structure, rewirable and non-rewirable, etc.

b) In principle, the same type of electrical accessories with basically the same structure, the same function, and the same main material category (such as metal, thermoplastic and thermosetting) can be taken as a certification unit.

Products from different manufacturers are considered as different certification units, and products from different production factories are considered as different certification units. Type tests of products of the same specifications and models can be carried out on samples from one factory.

3.2 Materials submitted for certification application

3.2.1 Application materials

a. Formal application form

b. Factory inspection questionnaire (when first applying)

c. Product description (CQC11-462298.01-2011)

3.2.2 Proof materials

a. Registration certificate of the applicant, manufacturer, or production factory, such as business license, organization code

b. If the applicant is a seller or importer, a copy of the relevant contract between the seller and the manufacturer, or between the importer and the manufacturer must also be submitted.

c. Agent's power of attorney (if any)

d. Other required documents

4. Product type test

4.1 Samples

4.1.1 Sample sending principles and sample quantity

If there is only one model in the application unit, the samples of this model shall be submitted. When applying for certification with a series of products as the same application unit, representative samples shall be selected for type testing. If necessary, the covered samples shall be submitted for supplementary difference testing. The applicant shall submit samples to the testing agency entrusted by CQC as required. The number of samples is as follows:

15 sets of samples for the main inspection model (including 3 sets of spare samples)

and 3 sets of samples for each covered model.

4.1.2 Sample and data handling

After the test is completed and the test report is issued, the relevant information will be kept by the testing agency and the samples will be disposed of in accordance with relevant CQC regulations.

4.2 Type test

4.2.1 Based on standards

GB/T 11918.1-2014 Plugs, socket-outlets and couplers for industrial purposes - Part 1: General requirements

GB/T 11918.2-2014 Plugs, socket-outlets and couplers for industrial purposes - Part 2: Dimensional compatibility and interchangeability requirements for pin and contact-tube accessories

GB/T 11918.4-2014 Plugs, socket-outlets and couplers for industrial purposes - Part 4: Switched socket-outlets and connectors with or without interlock

4.2.2 Type test requirements

Product inspection items are all applicable items specified in the standards mentioned in 4.2.1.

4.2.3 Determination

Type tests shall comply with product standards. If any one item does not meet the standard requirements, the product of the certification unit is deemed to be non-compliant with the certification requirements. If part of the type test items are unqualified, the applicant is allowed to make rectification; the rectification shall be completed within the time limit specified by the certification body (counted from the date of the notification of type test non-conformity). If the rectification is not completed on time, the applicant is deemed to have given up the application; the applicant may also take the initiative to terminate the application.

4.2.4 Type test time limit and test report

The testing agency designated by CQC will test the samples and issue a test report in the prescribed format. The sample testing time is generally 35 working days from the receipt of the samples and the testing fee; the time for the enterprise to make rectifications and re-tests due to unqualified test items is not included.

After the certification is approved, the testing agency is responsible for sending a test report to the applicant.

7.1.1 Supervision-inspection time

In general, annual supervision shall be arranged within 12 months after the initial factory inspection, and the interval between each annual supervision-inspection shall not exceed 12 months. The certification body may adjust the timing of supervision-inspection on an annual basis according to the actual situation of product production. The number of supervision-inspection man-days is shown in Table 2. The supervision frequency may be increased if any of the following situations occurs:

1) The certified product has serious quality problems or the user has made a serious complaint and it is verified that the certificate holder is responsible;

2) When CQC has sufficient reasons to question the conformity of the certified product with the certification basis standards;

3) When there is sufficient information to indicate that changes in the producer or production factory's organization, production conditions, quality management system, etc. may affect product conformity or consistency.

7.1.2 Contents of supervision-inspection

The post-certification supervision-inspection method adopts the Supervision-inspection of the factory's product quality assurance ability + Consistency check of the certified products. CQC conducts the supervision-inspection on the factory according to CQC/F001-2009 CQC Certification Requirements of Factory Quality Assurance Ability. Articles 3, 4, 5, and 9 are mandatory items for each supervision-inspection, and other items can be checked selectively.

The content of the consistency check of certified products is basically the same as that of the product consistency check during the initial factory inspection. At the same time, the product quality inspection is verified according to Table 1.

7.1.3 Conclusion of supervision-inspection

The inspection team is responsible for reporting the conclusion of the supervision-inspection. If the conclusion of the supervision-inspection is NOT-PASS, the inspection team will report directly to the CQC. If there are non-conformities in the supervision-inspection, the factory shall complete the rectification within the specified period, and the CQC shall verify the rectification results in an appropriate manner. If the rectification is not completed on time or the rectification is NOT-PASS, the supervision-inspection is NOT-PASS.

7.2 Supervision sampling inspection

When necessary, sampling inspection shall be carried out on certified products during annual supervision. Samples shall be randomly selected from qualified products

produced by the factory (including production lines, warehouses, and markets), and each production factory (site) shall be sampled. In principle, the sampling base shall be more than 20 times the number of samples taken. The sampling base may not be considered when sampling at the end of the production line or at the market/factory sales outlets. If no samples can be taken on site, re-sampling shall be arranged within 20 days. If still no samples can be taken, the relevant certificates shall be suspended. The taken samples shall be sent to the designated testing agency within 15 days, and the designated testing agency shall complete the inspection work within 20 working days (counted from the receipt of samples and testing fees) and report the inspection conclusions to the certification body. All the test items specified in the standards adopted for type testing can be used as items for supervisory sampling inspection. The inspection items shall be carried out in accordance with the supervisory sampling inspection plan formulated by CQC.

7.3 Evaluation of results

CQC organizes a comprehensive evaluation of the conclusions of the supervision-inspection and the supervision sampling inspection (if necessary). If the evaluation is qualified, the certification certificate will remain valid. If the supervision-inspection fails or the supervision sampling inspection fails, the annual supervision is judged to be unqualified and the provisions of 8.3 shall be implemented.

8. Certification certificate

8.1 Maintenance of certification certificate

8.1.1 Validity of certificate

The certification certificate for products covered by this Rules does not set a deadline, and the validity of the certificate is maintained by CQC's regular supervision.

8.1.2 Changes to certified products

8.1.2.1 Application for change

When the content on the certificate changes, or when there are changes in the safety-related design, structural parameters, appearance, or key raw materials of the product, the certificate holder shall apply to CQC.

8.1.2.2 Evaluation and approval of changes

CQC evaluates the content of the change and the information provided to determine whether the change can be made. If tests and/or factory inspections are required, the change can only be made after the tests and/or factory inspections are passed. In principle, the evaluation of changes shall be based on the certified products that were

initially subjected to the product type test, and tests and factory inspections shall be carried out in accordance with relevant CQC regulations.

Approve those changes that meet the requirements. If the certificate needs to be renewed, the serial number and the effective date of approval of the certificate will remain unchanged.

8.2 Extension of products covered by the certification certificate

8.2.1 Extension procedures

When the certificate holder needs to increase the certification scope to cover a product that is the same certification unit as the certified product, the procedures shall be started from the certification application and the extension requirements shall be stated. CQC verifies the consistency of the extended product with the original certified product, confirms the effectiveness of the original certification results on the extended product, performs supplementary tests or factory inspections on the differences and/or extended scope, and issues a certification certificate separately or renews the certification certificate according to the certificate holder's requirements.

In principle, the evaluation of extensions shall be based on the certified products that were initially subjected to the product type test.

8.2.2 Sample requirements

The certificate holder shall first provide the relevant technical information of the extended product. If samples are required, the certificate holder shall select and submit samples for verification or difference testing in accordance with the requirements of 4.1.

8.3 Suspension, resumption, cancellation and revocation of certification certificate

The use of the certificate shall comply with the requirements of CQC's relevant certificate management regulations. When the certificate holder violates the relevant certification regulations or the certified product does not meet the certification requirements, CQC will suspend, revoke and cancel the certification certificate in accordance with the relevant regulations and announce the results of the processing. The certificate holder can apply to CQC for suspension or cancellation of the certification certificate it holds.

During the suspension period, if the certificate holder needs to resume the certificate, he/she shall apply to CQC for resumption within the prescribed suspension period, and CQC will resume it in accordance with relevant regulations. Otherwise, CQC will revoke or cancel the suspended certification certificate.

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