

CESI-HV-LV Type 5 SCHEME

CERTIFICATION OF TYPE CONFORMITY OF HIGH-VOLTAGE AND LOW-VOLTAGE ELECTRICAL PRODUCTS

REGULATIONS

Document under surveillance by CESI Technical Committee for Certification (CTC). It replaces Regulations C0021340.

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Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
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REVISION HISTORY

Revision Number	Date	CESI Ref. Number	List of variations and modified clauses
3	2021/09/08	C1014178	Modified the header of the document. § 5.2.1: modified the sampling criteria as per Accredia recommendations.
2	2020/12/28	C0021340	§ 5.2.1: modified the sampling criteria in case of batches of identical products.
1	2020/07/07	C0010722	§ 5.2.3: added the note regarding the tests in the laboratories of CESI Group.
0	2019/09/17	B9018042	First issue.

1 GENERAL

The present Scheme covers the certification of type conformity of high-voltage and low-voltage electrical products with the requirements of the applicable reference normative documents (national or international Standards, technical specifications, codes of practice, regulations, technical guides), carried out by CESI as Product Certification Body, in the field of ACCREDIA accreditation No.018B of conformity with the Standard ISO/IEC 17065.

With reference to the Standard ISO/IEC 17067¹, the present Certification Scheme is classified as type “5”. The performance of the activity, the possible issue of the Certificate and the maintenance of the certification are subordinated to the acceptance by the Applicant, for what belongs to him, of ACCREDIA Regulations RG-01², and, in particular, of the right of ACCREDIA Inspectors to visit his premises (together with CESI Inspectors).

The Certificate of type conformity granted by CESI attests that the products identified in it and physically available at the time of the certification, were submitted to CESI verification and found in compliance with the reference normative documents.

The responsibility of declaring the conformity of other samples, having the same designation as those verified by CESI, rests with the Applicant.

According to the Standard ISO/IEC 17065, the access to the Scheme is not discriminatory, nor conditioned by the participation to any association or group but is open to any Applicant submitting a formal request, independently from the number of Certificates already granted to him.

CESI guarantees that the personnel involved in the activity are not in conditions of conflict of interest and that they offer the necessary guarantees of confidentiality towards third parties.

¹ Or equivalent national version. The same applies to all following citations in the text.

² All ACCREDIA Regulations can be found in the web site www.accredia.it.

2 DEFINITIONS

- **Certification Scheme**
Certification system regarding products to which the same Standards, the same particular rules and the same procedure apply.
- **Preliminary Evaluation Report**
Intermediate document that briefly describes the evaluations of conformity carried out. It may deal with constructive checks, evaluations on possible extensions of the conformity, inspections to tests carried out in external laboratories and witnessed by a CESI Inspector, etc. It contains the references to any document that permits the traceability of the activity carried out (drawings, constructive documents, Certificates of components, Test Reports, Calibration Certificates, laboratory check-lists, non-conformities, etc.).
- **Evaluation Report**
Final document that briefly describes all the reference documents and information necessary to evaluate the results of the tests and checks required by a type conformity certification. The evaluation must bring to the decision on the conformity of the product with the reference normative documents.
- **Certificate of type conformity**
Certificate of conformity that attests that a product is in compliance with a particular Standard or other normative document.
- **Technical Committee for Certification (CTC)**
Committee established by CESI, as Product Certification Body accredited by ACCREDIA according to the Standard ISO/IEC 17065, that supervises the product certification activities carried out by CESI, managing and assuring the independence, impartiality and the competence of the Certification Body itself. The Committee is representative of all the main parties interested in the certification activities.

3 FIELD OF APPLICATION

3.1 Products

The Scheme applies to the electrical products in general.

The list of the types of products subject to the Scheme is approved by CTC and is included in the enclosure of ACCREDIA Accreditation Certificate, available in the web site www.cesi.it.

The certification may be requested for:

- an individual product (prototype, individual sample);
- a homogeneous series of products having the same basic design but differing for a limited set of characteristics (size, rating, variants, etc.).

3.2 Requirements

The Scheme deals with the certification of conformity of products with the requirements of applicable reference normative documents. The certification may be granted with reference to one or more of the applicable reference normative documents considered by the Scheme.

The list of the reference normative documents applicable to each different type of product is approved by CTC and is included in the enclosure of ACCREDIA Accreditation Certificate, available in the web site www.cesi.it.

3.3 Certificates

The certification according to the Scheme generally attests the type conformity of the product with all the requirements of one or more applicable reference normative document; the attestation of conformity with the applicable reference normative document, limited to some significant characteristics is permitted only under the conditions presented in this clause.

The ACCREDIA mark is placed on the Certificate (where applicable).

The Scheme provides the issue of the following Certificates:

a) Certificate of type conformity with the applicable reference normative documents

This Certificate attests the type conformity of the product with all the requirements of the reference normative documents, corresponding to its ratings and conditions for use specified by the Applicant.

b) Certificate of type conformity with the applicable reference normative documents, limited to some significant characteristics

This Certificate attests the type conformity of the product with all the relevant requirements of the reference documents, with respect to only some significant characteristics, corresponding to its ratings and conditions for use specified by the Applicant.

4 APPLICATION FOR CERTIFICATION

The Applicant shall submit to CESI a formal request, duly signed, using the available application form supplied by CESI, for each desired Certificate.

Such application form includes, in particular, the following information:

- type of Certificate requested;
- applicable reference normative documents;
- identification of the Applicant;
- object (individual, sample batch, homogeneous series);
- description of the product to be certified;
- designation of the product to be certified;
- product ratings that must be stated by the Certificate;
- language of the Certificate (English or Italian).

Generally, the following documents shall be annexed to the application form:

- descriptive technical documents of the product (catalogues, technical specifications, drawings, schemes, manufacturing specifications, etc.);
- copy of the Scheme Regulations, duly signed for acceptance;
- copy of the General Sales Conditions for Product Certification and Type A Inspection, duly signed for acceptance.

Reports of tests already performed on the product may be enclosed to the application form and CESI reserves the right to evaluate them for the certification process.

Upon receipt of the application, CESI performs a preliminary examination of the documents, to verify completeness and conformity with the Scheme.

If the result is positive, CESI informs the Applicant, prepares or updates the relevant offer and, after the receipt of the order conforming to such offer, starts the certification procedure.

CESI undertakes to maintain confidentiality towards third parties about all the information requested when submitting the application (necessary to define the subsequent activities) and gathered during the whole certification process.

The Applicant cannot advertise the ongoing certification applications until he has obtained the relevant Certificate.

5 PROCEDURE FOR CERTIFICATION

5.1 Grant conditions

The examinations of the documents and the type tests on one or more samples representative of the population of products subject to certification, shall give evidence that they conform with all applicable requirements of the reference normative documents.

When specified by the reference normative documents, also the components incorporated into the samples shall conform to the applicable requirements important for certification. The evidence of conformity may be given by appropriate documents (Certificates, Test Reports).

The evaluation of the manufacturing place organization shall demonstrate compliance with the technical and organizational conditions guaranteeing the maintenance of repeatable production of products at the level confirmed by the type test of the product.

5.2 Type assessment of the product

5.2.1 Selection of the samples for the assessment

For each product to be certified, the number of samples to be assessed with the performance of type tests shall be determined in conformity with the requirements of the reference normative documents.

When the certification is requested for a batch of identical products, the samples to be submitted to tests are chosen by CESI by applying the criterion of randomness in the population and the number of samples to be tested (or to be subjected to additional tests in case of non-decisive results) it is determined in compliance with the requirements of the applicable regulatory documents and technical specifications as well as, in the alternative, considering the specific needs identified by CESI.

When the certification refers to several product types having similar design but differing for a limited number of characteristics and if the initial analysis performed by CESI confirms that they constitute a homogeneous series, CESI chooses for the type tests the samples considered representative of the complete series.

5.2.2 Assessment of the compliance of the product technical documentation with the manufacturing and dimensional specifications

CESI assesses that the technical documentation of the product to be certified, supplied by the Manufacturer, is in compliance, in type and contents, with the manufacturing and dimensional requirements of the applicable normative documents.

These documents form, together with those of sub-clause 5.2.4, the descriptive documentation of the product to be certified.

5.2.3 Assessment of the conformity of the samples

CESI assures that the samples are submitted to the tests and inspections required by the applicable reference normative documents and appropriate to the type of Certificate requested.

The Certificate of conformity with the applicable reference normative documents requires the performance of the type tests, inspections and verifications prescribed by the normative documents themselves.

These activities may consist of:

⇒ Performance of tests in the laboratories of CESI Group.

Note. If the executed tests are not accredited according to ISO/IEC 17025, the fulfilment of the requirements of the Standard is assessed by the CESI Inspector on the basis of the documents produced by the laboratory. The presence of the Inspector during the tests, aimed at preventing or solving possible critical elements in real time, is decided case by case by CESI.

⇒ Performance of tests in external laboratories, chosen by the Applicant or by CESI after Applicant's approval, in the presence of CESI Inspectors, provided that they comply with all the conditions of one of the two following criteria:

Criterion a)

- the laboratory is accredited according to the Standard ISO/IEC 17025 - for the tests to be certified - by an Accreditation Body member of EA (European co-operation for Accreditation) or ILAC (International Laboratory Accreditation Cooperation);
- the Test Reports are prepared according to the requirements of the Standard ISO/IEC 17025 and show the mark and certificate number of the Accreditation Body;
- the dimensional and technical characteristics of the tested objects correspond to those indicated on drawings univocally identified by the laboratory, to allow CESI Inspector a complete and sure check of the correspondence between the samples previously tested and those submitted to the certification process.

Note. The fulfilment of the conditions of the criterion is always assessed by the CESI Inspector on the basis of the documents produced by the laboratory. The presence of the Inspector during the tests, aimed at preventing or solving possible critical elements in real time, is decided case by case by CESI.

Criterion b)

- the personnel of the laboratory are competent and have adequate facilities to perform the specific tests required by the certification process;
- the measuring instruments and systems used are managed according to procedures that ensure the control of the calibration status with uninterrupted traceability up to the primary national or international standards;
- the Test Reports comply with the Standard ISO/IEC 17025;
- the dimensional and technical characteristics of the tested objects correspond to those indicated on drawings univocally identified by the laboratory, to allow CESI Inspector a complete and sure check of the correspondence between the samples previously tested and those submitted to the certification process.

Note. The compliance with the conditions of the above criterion is always evaluated by the CESI Inspector during test witnessing. For particular tests, such as long duration tests, the CESI Inspector has the faculty to evaluate in which phases its presence may not be indispensable, subject to the adoption of measures to guarantee the regularity of the tests.

On CESI decision, the inspections to tests may also be commissioned, with the Applicant's consent, to professionals outside CESI that, on the basis of the supplied curricula, show their knowledge of the activities to be carried out. The responsibility of the Inspector's behaviour always belongs to CESI. The Applicant may refuse the Inspector, giving adequate reason within 5 (five) working days from the receipt of the information.

⇒ Validation of tests carried out before the application for certification.

In order to consider for certification purposes the tests carried out prior to the presentation of the certification application (previous tests) it is necessary that they were held in the laboratories of CESI Group, or in other laboratories in the presence of an Inspector, whose qualification is acknowledged by CESI, who ascertained and documented the conditions of the above mentioned criterion b) or if they were carried out in laboratories complying, at the time of the test performance, with the conditions of the following criterion:

Criterion c)

- the laboratory was independent from the Applicant, the Manufacturer of the product or their industrial groups;
- the laboratory was accredited according to the Standard ISO/IEC 17025 - for the tests to be certified - by an Accreditation Body member of EA (European co-operation for Accreditation) or ILAC;
- the Test Reports comply with the Standard ISO/IEC 17025;
- the dimensional and technical characteristics of the tested objects correspond to those indicated on drawings univocally identified by the laboratory, to allow CESI Inspector a complete and sure check of the correspondence between the samples previously tested and those submitted to the certification process.

Note. CESI, in any case, reserves the right to require the performance of tests deemed necessary to validate the previous experimental activities; these tests may be carried out in CESI or in external laboratories with the presence of the CESI Inspectors, as indicated in criterion b). The performance of the tests can be required after design changes considered influential on the result of the previous tests, after modification or update to the reference normative documents, after change of production plant, etc.

5.2.4 Assessment of the compliance of samples with the product descriptive technical documentation (identification of the product)

The tested samples must be identified by means of a unique code (serial number or waybill code or batch number, etc.). CESI assesses the compliance of the samples tested with their technical identification documents. These documents form, together with those of sub-clause 5.2.2, the descriptive documentation of the product to be certified. This latter is mentioned in the Evaluation Report, is signed by CESI and is returned to the Applicant who is required to keep it for the period of validity of the Certificate.

If the certification is carried out according to ENEL or TERNA prescriptions, also one or more detailed lists of the above mentioned documents shall be supplied.

A copy of the descriptive documentation is not required to be filed at CESI, except for any lists.

5.2.5 Handling of the samples

CESI assures the correct handling of the samples during the checks. During the process the samples may only be subject to maintenance operations permitted by the applicable reference normative documents and according to the Applicant's instructions.

The Scheme does not provide for storage by CESI either of the samples already submitted to the checks or of samples not yet tested.

5.3 Evaluation of the factory production processes and management system

CESI evaluates the factory capabilities to manufacture the product according the design specification in order to guarantee to the products the same performances evaluated during the type tests of the original prototype or samples.

The evaluation is made performing a dedicated inspection to the manufacturing place during which the following activities take place:

- review of the major elements of ISO 9001 implemented by manufacturer;
- assessment of the inspection process of raw materials;
- assessment of the production process;
- assessment of the packaging and storing process;
- assessment of the transportation process;
- assessment of the procedures of routine testing;
- review of quality control laboratory and routine test results.

The assessment result will be included in a dedicated Inspection report.

5.4 Evaluation of the results and issue of the Certificate

CESI issues an Evaluation Report with the results, significant for certification, of the analysis of the tests and verifications carried out.

If the results of all the checks show the conformity with the requirements of sub-clause 5.1, CESI grants the Certificate of type conformity, whose issue is subjected to the control of CTC, according to the prescriptions of item 5 of CTC Regulations.

If the results of the checks on the product and on the relevant documents do not conform to the requirements, CESI informs the Applicant, explaining the non-conformities and fixes a deadline to adopt the necessary corrective actions. If no action is taken within that date, the application for certification is rejected.

If the samples are modified, the checks shall normally be repeated; CESI examines the non-conformities recorded and the changes carried out and reserves the right to repeat the inspections and tests considered significant.

The Evaluation Report is issued in English or Italian language.

5.5 Surveillance procedure

CESI carries out periodic (typically annual) surveillance on the maintenance of the conditions that have allowed to issue the Certificate to the Applicant.

The production areas, warehouses and laboratories of the Applicant and its possible Suppliers must be open to CESI inspectors, who may arrive, even without notice, at any time during working hours.

Inspectors have the right to carry out all the checks they deem useful to verify that the Applicant observes the commitments undertaken and, in particular, are authorized to carry out an inspection visit to the production process every year and to view the results of the tests performed by the Applicant.

In order to carry out the necessary surveillance checks, CESI has the right to verify or request the verification of some samples of the product taken from the Applicant's factory or warehouses, compatibly with its production program.

The Applicant undertakes to allow CESI to collect or verify the specimens chosen for this purpose by the Inspectors during the surveillance visits on the process. The Applicant must also undertake to deliver these samples to CESI, taking all precautions to maintain them in good conditions, within a maximum of thirty days from the date of collection.

All costs for the aforementioned activities (costs of inspections, samples, collection, shipment to CESI, tests, etc.) will be charged to the Applicant. In particular, CESI inspection services will first be quoted in an offer.

At the end of the surveillance checks, all the tested samples are returned, in the conditions they are found after the tests, to the Applicant, under his responsibility. The shipping costs are charged to the Applicant.

6 MAINTENANCE, DURATION, UPDATING AND TRANSFER OF THE CERTIFICATE

6.1 Conditions for maintenance

The grant of a Certificate of type conformity allows the Grantee to show it or to make reference to it for all legal, promotional and commercial purposes, provided that it does not induce any misunderstanding concerning its actual meaning.

The Grantee shall ensure that the Certificate is correctly used. In particular he shall be committed to avoid the occurrence of misunderstandings:

- between the sample referred to in the Certificate and the other products whose conformity is not attested by CESI;
- between the requirements the certified product has been found conforming to and those not subject of CESI certification.

With respect to the certified products, the Grantee shall keep records of the claims received from his clients and relevant corrective actions. These records shall be available to CESI after request.

6.2 Certificate duration and extension

According to ACCREDIA Regulations RG-01, the Certificate validity is limited in time. The duration of the validity is fixed by CESI in 3 (three) years starting from the issue date.

The extension of the Certificate at its natural expiry date is allowed after request from the Grantee. For this purpose, the Manufacturer capabilities must be evaluated and confirmed through a factory inspection. Moreover the Manufacturer shall be requested to let available to CESI a sample of the product together with the documentation relevant to the expiring certification.

CESI Inspector identifies the sample on the basis of the above-mentioned documentation. If the sample is found in compliance with the documentation and the factory assessment is positive the extension is granted. The duration of the extension is 3 (three) years. The duration of further extensions requested after the first one will always be 3 (three) years.

The extension is not allowed in case of replacement of the manufacturing factory with no positive assessment.

6.3 Certificate updating and transfer

The Grantee may request a new Certificate, based on the contents of a previous CESI Certificate of type conformity, in the following cases:

- updating to attest the conformity with new applicable reference normative documents, or with updated editions, with respect to the ones referred to in the original Certificate;
- updating following changes or new versions of the design of the product;
- transfer following modifications to the name or trademark of the product;
- transfer following modifications to the Grantee Company name;
- transfer following modifications to the Manufacturer's Company name.

The relevant descriptive technical documents shall be submitted to CESI, which performs all the checks required for granting the Certificate; CESI reserves the right, in case of Certificate updating, to repeat inspections and tests, considered significant, on new samples.

If the results of the checks, documented by an Evaluation Report, are positive, CESI issues the new Certificate.

The duration of the updated Certificate is 3 (three) years.

6.4 Checks on Certificate use

CESI controls the use of the Certificate made by the Grantee by:

- gathering publications appearing on press/literature and information arriving from the market;
- analysing actual complaints on misuse of the Certificate.

In case the use results to be incorrect, CESI invites the Grantee to discontinue such behaviour, asking for measures aimed to obtain adequate solving actions. In case of repeated misuse, CESI informs CTC to obtain the withdrawal of the Certificate.

6.5 Use of CESI logo

The Grantee of a Certificate can make full copies of the document, but he is not allowed to extract and use in any other way the CESI logo and the associated ACCREDIA mark.

7 SUSPENSION AND WITHDRAWAL OF THE CERTIFICATE

The Certificate is suspended by CESI when CESI ascertains the occurrence of one of the following conditions:

- the Grantee ceases to comply with the obligations accepted for the granting of the Certificate;
- the conditions for granting the Certificate have vanished.

The suspension of the Certificate produces the following effects:

- interdiction to use the Certificate in association with the products and in commercial documents;
- submission of the information to CTC to allow adequate examination.

The Certificate is withdrawn by CESI when:

- the Grantee discontinues his activity;
- the conditions for maintaining the Certificate have vanished;
- the Certificate is repeatedly misused.

The withdrawal of the Certificate produces the following effects:

- actual withdrawal of the document;
- interdiction to use the Certificate in association with the products and in the commercial documents;
- cancellation of the product from the list of the certified products;
- adequate publicity by CESI of the withdrawal;
- submission of the information to CTC to allow adequate examination.

In both cases, at the completion of the examination, CTC may either restore the Certificate, or withdraw it, or require appropriate corrective actions.

8 COMPLAINTS AND APPEALS

The Applicant (or a third party) has the possibility to present complaints about the behaviour of CESI during the certification process or to appeal to obtain the change of a decision taken by CESI during the process itself.

All the complaints and appeals are submitted by CESI to the examination of CTC, generally during the first meeting after the complaint or appeal.

CTC examines the reasons of the disagreement and the decisions eventually already taken by CESI and deliberates on the matter. The CTC resolutions are mandatory for CESI.

9 CHANGES TO THE REGULATIONS

The present Regulations and all their modifications are approved by CTC.

In case of changes while the inspection activities are in progress, the Applicant is promptly informed by CESI and retains the right to accept or not the new version of the Regulations if the changes are not due to mandatory aspects.

An updated copy of the Regulations can be requested by consulting the website www.cesi.it.

The Applicant

Stamp and signature _____

Date _____

The Applicant declares explicitly of having read carefully and approved, with respect and to the effects of items 1341 and 1342 of the Italian Civil Code, all the sections of the present Regulations and in particular the following: 4 (Application for certification), 5 (Procedure for certification), 6 (Maintenance, duration, updating and transfer of the Certificate), 7 (Suspension and withdrawal of the Certificate).

The Applicant

Stamp and signature _____

Date _____