IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System)

Acceptance of Components within the IECEE
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FOREWORD

Document Owner
CMC WG 29 “Certification”

History of changes

<table>
<thead>
<tr>
<th>Date</th>
<th>Brief summary of changes</th>
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<tr>
<td>2017-03-15</td>
<td>Adding of disclaimer, adding of this foreword including History of changes, clause 4.4 is modified and 4.5 is added to reflect the PAC decision (15/2014)</td>
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<td>2020-06-06</td>
<td>Small changes to note 1 under clause 7.1.</td>
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<td>Editorial updates of OD-2039 removing any reference to the component database as per CMC Decision 26/2023 Recommendation A.5</td>
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Introduction

This operational document contains definitions and basic principles for acceptance of components within the IECEE. The intended implementation of this document is to enhance the common understanding among the National Certification Bodies (NCBs) participating in the Schemes of the various component acceptance scenarios encountered by the members, as well as, to establish a minimum proof of component compliance with the applicable acceptance criteria expected in the CB Test Reports.

Today, IECEE has two procedures in dealing with acceptance of components in the end products. This Operational Document describes “generic” approach to component acceptance. Component acceptance declarations prepared by the NCBs are a tool for improving component acceptance under the “generic” approach.

1 Scope

This document describes component related situations and decisions in the process of issuing and accepting CB Test Reports and Certificates for end products. Definitions

1.1 Component

For the purpose of this document a component has been defined as follows:

Component – a part or a subassembly intended to be installed into an end product in a factory by the end-product manufacturer. Some examples are: switches for appliances, capacitors, filters, fuseholders, build-in power supply, internal CD Rom or hard drive, and similar.

1.2 Harmonized standard

For the purpose of this document a harmonized standard issued by a national (e.g. DIN, ANSI, SCC, BSI) or regional (e.g. CENELEC) body has been defined as follows:

Harmonized standard – means a standard that is nationally recognized as a standard harmonized with IEC and for which there are published and readily available National or Regional Differences from the IEC requirements.

1.3 National standard technically equivalent to IEC standard

For the purpose of this document, the term “technically equivalent standard” means that even though the national standard is not officially declared as harmonized with the IEC requirements, all parameters have either the same or more stringent requirements as declared by the NCB (in cooperation with the Member Body, as applicable).

Note: Any national differences that need to be addresses for full compatibility of both standards are clearly identified by the NCB claiming technical equivalency of the national standard.

1.4 Certification documentation

For the purpose of this document, a certificate, a license, or similar evidence of certification are considered equivalent. See clause 7.1.

2 General Principles

3.1 Components shall comply with the relevant requirements of the applicable component standards and the component requirements of the end-product standard.

3.2 NCBs in countries that have not yet harmonized their component standards with IEC standards are strongly recommended to develop procedures permitting the acceptance of tests based on IEC component standards or on national component standards of the accepting NCB.

3.3 All component related differences in requirements and acceptance practices shall be declared by the NCBs (in cooperation with the Member Body) in the CB Bulletin.
3 Potential situations for component requirements

The following four cases can be identified:

4.1 There is an existing IEC standard for the component;
4.2 There is no IEC standard but there is a regional or national standard for the component;
4.3 No component requirements exist;
4.4 The end-product standard contains additional component requirements.
4.5 The end-product standard contains all applicable component requirements.

4 Component acceptance situations

The existence of an IEC standard for a component is the most desired situation, however, IEC standards do not exist for all components. The following outlines procedures for the acceptance of components for the situations identified above.

4.1 Existing IEC Component Standard

Two potential situations were identified as outlined in 5.1.1 and 5.1.2 below:

4.1.1 Component with CB Test Certificate

Where a component is provided with its own valid CB Test Certificate accompanied by the Test Report or information describing the conditions of component acceptability the following acceptance situations shall be considered:

4.1.1.1 No National Differences for component declared by the NCB

Component shall be accepted by the receiving NCB without further evaluation if no additional component requirements are specified in the end-product standard, otherwise, see 5.1.1.3.

4.1.1.2 Recognizing NCB has declared National Differences for component

4.1.1.2.1 National Differences have been addressed by an NCB

Component shall be accepted by the receiving NCB without further evaluation if no additional component requirements are specified in the end-product standard, otherwise, see 5.1.1.3.

4.1.1.2.2 National Differences have not been addressed by an NCB

Component shall be accepted by the receiving NCB after additional satisfactory evaluation to address the National Differences; see 5.1.1.3 to address additional component requirements specified in the end-product standard.

4.1.1.3 Additional component requirements specified in the national standard for the end product

4.1.1.3.1 Additional component requirements addressed by the issuing NCB

Component shall be accepted by the receiving NCB if National Differences have been addressed (5.1.1.2).

4.1.1.3.2 Additional component requirements not covered by the issuing NCB

Component shall be accepted by the receiving NCB after additional evaluation to address the additional component requirements.
4.1.1.4 The receiving NCB does not adhere to IEC component standard(s) referenced in the IEC end product standard

The following scenarios may exist:

4.1.1.4.1 The receiving NCB has a non-harmonized national component standard declared as a national difference

The receiving NCB may accept a Report issued by another NCB to the national standard of the receiving NCB, or conduct component testing according to its national standard.

4.1.1.4.2 The receiving NCB has a non-harmonized national component standard not declared as a national difference

Component shall be accepted by the receiving NCB based on the available CB Test Report according to the IEC component standard.

4.1.1.4.3 The receiving NCB has no national component standard

Component shall be accepted by the receiving NCB based on the available CB Test Report according to the IEC component standard.

4.1.2 Component without a CB Test Certificate

Where a component is not provided with its own valid CB Test Certificate for compliance with a relevant component standard it shall be checked for correct application and use in accordance with its specified ratings. It shall be subjected to the applicable tests of the end-product standard, as part of the end product, and to the applicable tests of the component standard, under the conditions occurring in the end product. In order to ease the process of acceptance, the applicable tests from component standard shall be reported in the Test Report for the component and attached to the end-product CB Test Report. The following acceptance situations shall be considered:

4.1.2.1 No additional requirements for the component in the end-product standard

4.1.2.1.1 No National Differences declared for component

Component shall be accepted by receiving NCB provided that component test report to IEC standard is available from the issuing NCB.

4.1.2.1.2 National Differences declared for component

- Component shall be accepted by receiving NCB provided that component test report to IEC standard is available from the issuing NCB and includes National Differences, otherwise.
- Component shall be accepted by receiving NCB when information provided in the Report fulfills acceptance criteria.
- Component shall be accepted by receiving NCB after additional evaluation addressing National Differences.

4.1.2.2 Additional requirements for component in the end-product standard

4.1.2.2.1 No National Differences declared

Component shall be accepted by receiving NCB provided that component test report to IEC standard is available from the issuing NCB.

4.1.2.2.2 National Differences declared for component

Same as 5.1.2.1.2.
Component provided with a national certificate, which indicates that, the component was tested to a harmonized standard and it shows limitations and/or conditions of use

Component shall be accepted by receiving NCB provided that any additional requirements (i.e., National Differences, end-product requirements, applicable tests of the component standard, under the conditions occurring in the end product) have been addressed in the end-product report.

Component tested to the requirement of a non-harmonized standard

Component may be accepted at the discretion of the receiving NCB.

Component tested to the component requirements in the end product only (not tested to the applicable component standard)

Component shall be accepted after additional evaluation to the applicable component requirements, where necessary.

The receiving NCB does not adhere to IEC component standard

See 5.1.1.4.

No existing IEC Component Standard

Potential situations identified for evaluation and acceptance of components in the end product in case no IEC standard for component is available. This situation is possible due to quickly changing technology.

It is not allowed to issue a CB Test Certificate for a component if there is no existing IEC component standard accepted for use in the IECEE. The test results for such component testing shall be included in the CB Test Report of the end product.

Receiving NCB has a national/regional component standard and has declared it in National Differences for the end-product standard

The receiving NCBs are strongly encouraged to accept component reports prepared by the issuing NCB when testing has been done to their declared national/regional component standard(s).

Receiving NCB has no declared national component standard

Component shall be accepted by the receiving NCB when tested to the component requirements of the end-product standard under the conditions occurring in the end product.

Component information in the CB Test Reports

A Critical Component Table in CB Test Reports shall be completed according to the latest Edition of OD-2020.

Proof of component compliance

The minimum expected proof of component compliance with component standard(s) is a copy of certification documentation according to the definition in clause 2.5 of this proposed Component Acceptance Operational Document.

Note 1: This documentation shall contain, as a minimum, a model number, manufacturer’s name, standard used ref OD 2020 clause 4.7.

Note 2: Due to different systems at each NCB, the expected proof of component compliance with the requirements may be different.

Note 3: The column in the Critical Component Table called “Mark(s) of conformity” is used to identify/describe proof of component’s compliance with the requirements used by Issuing Body during the end product investigation.

Note 4: When providing product description in the CB Test Report special emphasis should be place on explaining the role of specific components in the end product to assist Recognizing Bodies with identification of truly safety critical components in the end product. This is especially important to those NCB that “waive” sample requirements.