SLOVENSKI STANDARD
oSIST prEN IEC 61318:2020

01-februar-2020

Nadomešča:
SIST EN 61318:2008

Delo pod napetostjo - Ugotavljanje skladnosti za orodja, naprave in opremo

Live working - Conformity assessment applicable to tools, devices and equipment

Arbeiten unter Spannung - Konformitätsbewertung anwendbar auf Werkzeuge, Geräte und Ausrüstungen

Travaux sous tension - Evaluation de la conformité applicable à l'outillage, au matériel et aux dispositifs

Ta slovenski standard je istoveten z: **prEN IEC 61318:2019**

ICS:

13.260	Varstvo pred električnim udarom. Delo pod napetostjo	Protection against electric shock. Live working

oSIST prEN IEC 61318:2020 **en**

78/1301/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: **IEC 61318 ED4**	
DATE OF CIRCULATION: **2019-12-20**	CLOSING DATE FOR VOTING: **2020-03-13**
SUPERSEDES DOCUMENTS: **78/1203/CD,78/1226A/CC**	

IEC TC 78 : LIVE WORKING

SECRETARIAT: France	SECRETARY: Mrs Sophie Chabin
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.

FUNCTIONS CONCERNED:

☐ EMC ☐ ENVIRONMENT ☒ QUALITY ASSURANCE ☐ SAFETY

☒ SUBMITTED FOR CENELEC PARALLEL VOTING

☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

Attention IEC-CENELEC parallel voting

The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.

The CENELEC members are invited to vote through the CENELEC online voting system.

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

TITLE:

Live working - Conformity assessment applicable to tools, devices and equipment

PROPOSED STABILITY DATE: 2023

NOTE FROM TC/SC OFFICERS:

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LIVE WORKING – CONFORMITY ASSESSMENT APPLICABLE TO TOOLS, DEVICES AND EQUIPMENT

FOREWORD

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International Standard IEC 61318 Ed.4 has been prepared by IEC technical committee 78: Live working.

This fourth edition cancels and replaces the first edition which was issued as a technical report in 1994 with its Corrigendum 1 (2000), the second edition, withdrawn, which was issued as a standard in 2003 and the third edition issued as a standard in 2007. It includes the following significant technical changes from the previous edition:

Change of the purpose of the document from a prescriptive testing standard to a standard assisting the project team and the user in the conformance to respective product standards;

The text of this standard is based on the following documents:

FDIS	Report on voting
78/xxx/FDIS	78/xxx/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This standard has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

93 # INTRODUCTION

94 This standard is required to be applied by each IEC Live Working product standard for the purpose of
95 assessing whether or not each product meets the requirements of the relevant product standard.

96

LIVE WORKING – CONFORMITY ASSESSMENT APPLICABLE TO TOOLS, DEVICES AND EQUIPMENT

1 Scope

This standard defines assessment methods for products to assure that they conform to the requirements of the corresponding product.

The principles of *conformity assessment* for live working products are detailed in this standard to assist product standard developers in prescribing the best means to achieve suitable quality of every finished tool, device and piece of equipment.

The following elements are not covered by the present document, but are included in each product standard:

- *type tests*;
- provisions and description for routine, sampling and *acceptance tests*;
- identification and classification of *defects;*
- *risk analysis.*

This standard does not cover *conformity assessment* of commercial shipments or certifications.

This standard is not a quality management system standard nor to be used for regulatory purposes.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO Guide 51: 2014 *Safety aspects - Guidelines for their inclusion in standards*

ISO 2859-1:1999 *Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

3 Terms and definitions

For the purposes of the present document, the following terms and definitions apply.

3.1
acceptance test
contractual test to prove to the customer that the item meets certain conditions of its specification

[SOURCE: IEC 60050-151:2001, 151-16-23

3.2
conformity assessment
any activity which assists in determining whether or not relevant requirements of a standard are achieved in the finished product through direct or indirect means

[SOURCE: ISO/IEC Guide 7:1994, 3.1]

3.3
critical defect
any *defect* where judgement and experience indicates that it is likely to result in hazardous or unsafe conditions for individuals using or depending on the product

3.4
harm
physical injury or damage to the health of people, or damage to property or the environment

[SOURCE: ISO/IEC Guide 51:2014, 3.3]

3.5
hazard
potential source of *harm*
Note 1 to entry: The term *hazard* can be qualified in order to define its origin or the nature of the expected *harm* (e.g. electric shock hazard, electric arc hazard, crushing hazard, cutting hazard, toxic hazard, fire hazard, drowning hazard).

[SOURCE ISO/IEC Guide 51:2014, 3.5, modified to cover live working application]

3.6

major defect
defect on product, other than critical, that is likely to result in failure, or to reduce significantly the functionality of the product

3.7
minor defect
defect on product that is not likely to reduce significantly the functionality of the product

3.8
non-conformance
non-conformity
non-fulfilment of a requirement

[SOURCE: ISO 16426:2002, 3.15, modified by adjunction of a synonym]

3.9
risk
combination of the probability of occurrence of harm and the severity of that harm

[SOURCE: ISO/IEC Guide 51:2014, 3.9, modified: the note 1 to entry was deleted]

3.10
risk analysis
systematic use of available information to identify hazards and to estimate the *risk*

[SOURCE: ISO/IEC Guide 51:2014, 3.10]

3.11
routine test
conformity test made on each individual item during or after manufacture

[SOURCE: IEC 60050-151:2001, 151-16-17]

3.12
sampling plan
combination of sample size(s) to be used and associated lot acceptability criteria

[SOURCE: ISO 2859-1:1999, 3.1.17 modified by deleting the notes]

3.13
sampling test
test on a sample

[SOURCE: IEC 60058-151:2001, 151-16-20]

3.14
type test
conformity test made on one or more items representative of the production

[SOURCE: IEC 60050:2001, 151-16-16]

4 General

Principles of conformity assessment for live working products are detailed in this standard to assist product standard developers (manufacturers, users, etc.) in prescribing the best means to achieve conformance to the standard requirements of every finished tool, device and piece of equipment.

Non-conformance to product standards may results in *defect*s. Product *defect*s are categorized into three levels; *critical, major* and *minor defect*s as defined in 3.

Conformity assessment involves tests, records of processes, sampling plans and quality control documentation. The required records are determined through *risk analysis*, classification of *defect*s and corresponding methods of preventing these *defect*s.

Conformity assessment records shall be kept by the manufacturer for at least five years and in accordance with national or regional regulations.

5 Determination of defect type

In the application of this standard, every significant defect shall be determined and then classified according to type.

In order to determine the type of *defects* applicable to each product, it is necessary to understand the intended functionality. The properties required in the finish product relate to the application of the product. Where these properties are deficient, the resulting lack of functionality will have an impact which shall be evaluated.

Critical defects on tools, devices and equipment for live working are not acceptable. Major defects on tools, devices and equipment for live working are likely to result in failure or in a significant reduction of functionality, while minor defects do not reduce significantly the functionality

The evaluation of impact due to functional or other *defects* involves a *risk analysis.* The ISO/IEC Guide 51 - Safety aspects - *Guidelines for their inclusion in standards* provides a framework for performing *risk analysis*.

6 Conformity assessment methods

6.1 General

The main methods used in product manufacturing to prevent *defects* and ensure conformity to standards are testing, process documentation and quality assessment. A guide to developing general test methods (such as alternative test methods) is provided in Annex A.

6.2 Testing

Four categories of tests are included within live working product standards:

- *type test*;
- *routine test*;
- *sampling test*;
- *acceptance test*.

6.2.1 Type test

*Type test*s are performed on a relatively small number of items which are to be typical of all products. Tests performed on these few are to determine basic design and functional capabilities to their mechanical or electrical limits. Significant damage to the test object is probable.