IEC SC 121B : LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES

SECRETARIAT: Germany
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OF INTEREST TO THE FOLLOWING COMMITTEES: TC 64, SC 121A

HORIZONTAL STANDARD:
☐

FUNCTIONS CONCERNED:
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☐ ENVIRONMENT
☐ QUALITY ASSURANCE
☒ SAFETY

☒ SUBMITTED FOR CENELEC PARALLEL VOTING
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Attention IEC-CENELEC parallel voting

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

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In addition to their evaluation as being acceptable for industrial, technological, commercial and user purposes, Final Draft International Standards may on occasion have to be considered in the light of their potential to become standards to which reference may be made in national regulations.

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.

Recipients of this document are invited to consider for future work to include relevant “In Some Countries” clauses. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE AC/22/2007 OR NEW GUIDANCE DOC).

TITLE:
Low-voltage switchgear and controlgear assemblies - Part 4: Particular requirements for assemblies for construction sites (ACS)

PROPOSED STABILITY DATE: 2026

NOTE FROM TC/SC OFFICERS:

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FOREWORD

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IEC 61439-4 has been prepared by subcommittee 121B: Low-voltage switchgear and controlgear assemblies, of IEC technical committee 121: Switchgear and controlgear and their assemblies for low voltage. It is an International Standard.

This second edition of IEC 61439-4 cancels and replaces the first edition published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) alignment with IEC 61439-1:2020 regarding the structure and technical content, as applicable.
The text of this document is based on the following documents:

<table>
<thead>
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<th>Draft</th>
<th>Report on voting</th>
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<tbody>
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<td>121B/XXX/FDIS</td>
<td>121B/XXX/RVD</td>
</tr>
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Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This document is to be read in conjunction with IEC 61439-1:2020. The provisions of the general rules dealt with in IEC 61439-1:2020 are only applicable to this document insofar as they are specifically cited. When this document states "addition", "modification" or "replacement", the relevant text in IEC 61439-1:2020 is to be adapted accordingly.

Subclauses that are numbered with a 101 (102, 103, etc.) suffix are additional to the same subclause in IEC 61439-1:2020.

Tables and figures in this document that are new are numbered starting with 101.

New annexes in this document are lettered AA, BB, etc.

In this document, terms written in small capitals are defined in Clause 3.

The reader’s attention is drawn to the fact that Annex N lists all of the “in-some-country” clauses on differing practices of a less permanent nature relating to the subject of this document.

A list of all parts of the IEC 61439 series, under the general title Low-voltage switchgear and controlgear assemblies, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be:

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

NOTE Throughout this document, the abbreviation ACS (ASSEMBLY for construction site, see 3.1.101) is used for a low-voltage switchgear and controlgear assembly intended for use on construction and similar sites.

This document defines the specific requirements of ACS as follows:

– ASSEMBLIES for which the rated voltage does not exceed 1 000 V in case of AC or 1 500 V in case of DC;
– ASSEMBLIES where the nominal primary voltage and the nominal secondary voltage of transformers incorporated in ACS are within the limits specified above;
– ASSEMBLIES intended for use on construction sites, both indoors and outdoors, i.e. temporary places of work to which the public do not generally have access and where building construction, installation, repairs, alteration or demolition of property (buildings) or civil engineering (public works) or excavation or any other similar operations are carried out;
– transportable (semi-fixed) or MOBILE ASSEMBLIES with enclosure.

The manufacture and/or assembly can be carried out by an entity other than by the original manufacturer (see 3.10.1 of IEC 61439-1:2020).

This document does not apply to individual devices and self-contained components, such as motor starters, fuse switches, electronic equipment, etc. which will comply with the relevant product standards.

This document does not apply to assemblies for use in the administrative centres of construction sites (offices, cloakrooms, meeting rooms, canteens, restaurants, dormitories, toilets, etc.).

Requirements for electrical protection provided by equipment manufactured according to this document are given in IEC 60364-7-704.

2 Normative references

This clause of IEC 61439-1:2020 is applicable except as follows:

Addition:


IEC 60068-2-42, Environmental testing – Part 2-42: Tests – Test Kc: Sulphur dioxide test for contacts and connections

IEC 60364-7-704:2017, Low-voltage electrical installations – Part 7-704: Requirements for special installations or locations – Construction and demolition site installations

IEC 61439-1:2020, Low-voltage switchgear and controlgear assemblies – Part 1: General rules
IEC 61558-2-23, Safety of transformers, reactors, power supply units and combinations thereof – Part 2-23: Particular requirements and tests for transformers and power supply units for construction sites