

MADALPINGELISED APARAADIKOOSTED. OSA 7:  
ERIOTSTARBELISED KOOSTED NÄITEKS SADAMATE,  
KÄMPINGUTE, LAADAPLATSIDE VÕI  
ELEKTRISÕIDUKITE LAADIMISJAAMADE JAOKS

Low-voltage switchgear and controlgear assemblies -  
Part 7: Assemblies for specific applications such as  
marinas, camping sites, market squares, electric  
vehicle charging stations

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| <p>See Eesti standard EVS-EN IEC 61439-7:2023 sisaldab Euroopa standardi EN IEC 61439-7:2023 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.09.2023.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p> | <p>This Estonian standard EVS-EN IEC 61439-7:2023 consists of the English text of the European standard EN IEC 61439-7:2023.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 29.09.2023.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p> |
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ICS 29.130.20

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English Version

Low-voltage switchgear and controlgear assemblies - Part 7:  
Assemblies for specific applications such as marinas, camping  
sites, market squares, electric vehicle charging stations  
(IEC 61439-7:2022)

Ensembles d'appareillage à basse tension - Partie 7:  
Ensembles pour les applications spécifiques comme les  
marinas, les terrains de camping, les marchés et pour les  
bornes de charge de véhicules électriques  
(IEC 61439-7:2022)

Niederspannungs-Schaltgerätekombinationen - Teil 7:  
Schaltgerätekombinationen für bestimmte Anwendungen  
wie Marinas, Campingplätze, Marktplätze, Ladestationen für  
Elektrofahrzeuge  
(IEC 61439-7:2022)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

The text of document 121B/138/CDV, future edition 2 of IEC 61439-7, prepared by SC 121B "Low-voltage switchgear and controlgear assemblies" of IEC/TC 121 "Switchgear and controlgear and their assemblies for low voltage" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61439-7:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2024-06-06
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-09-06

This document supersedes EN IEC 61439-7:2020 and all of its amendments and corrigenda (if any).

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The text of the International Standard IEC 61439-7:2022 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60364-7-708:2017 NOTE Approved as HD 60364-7-708:2017 (not modified)

IEC 60364-7-709:2007 NOTE Approved as HD 60364-7-709:2009 (not modified)

IEC 60364-7-722:2018 NOTE Approved as HD 60364-7-722:2018 (modified)

IEC 60364-7-740:2000 NOTE Approved as HD 60364-7-740:2006

IEC 60670-24 NOTE Approved as EN 60670-24

IEC 61439-3 NOTE Approved as EN 61439-3

IEC 61643 (series) NOTE Approved as EN IEC 61643 (series)

IEC 61851-1:2017 NOTE Approved as EN IEC 61851-1:2019 (not modified)

IEC 61851-23 NOTE Approved as EN 61851-23

ISO 17409:2020 NOTE Approved as EN ISO 17409:2020 (not modified)

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Low-voltage switchgear and controlgear assemblies –  
Part 7: Assemblies for specific applications such as marinas, camping sites,  
market squares, electric vehicle charging stations**

**Ensembles d'appareillage à basse tension –  
Partie 7: Ensembles pour les applications spécifiques comme les marinas, les  
terrains de camping, les marchés et pour les bornes de charge de véhicules  
électriques**



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IEC Secretariat  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Low-voltage switchgear and controlgear assemblies –  
Part 7: Assemblies for specific applications such as marinas, camping sites,  
market squares, electric vehicle charging stations**

**Ensembles d'appareillage à basse tension –  
Partie 7: Ensembles pour les applications spécifiques comme les marinas, les  
terrains de camping, les marchés et pour les bornes de charge de véhicules  
électriques**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES –****Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations**

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IEC 61439-7 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.

This second edition cancels and replaces the first edition published in 2018. It constitutes a technical revision.

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

- a) a general editorial review and a technical revision.

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

| Draft        | Report on voting |
|--------------|------------------|
| 121B/138/CDV | 121B/150/RVC     |

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 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 applicable to this document where 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 701 (702, 703, 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 701.

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

In this document, the term assembly is defined in 3.1.1 of IEC 61439-1:2020.

The reader's attention is drawn to the fact that Annex FF 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.

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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## LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES –

### Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations

#### 1 Scope

Clause 1 of IEC 61439-1:2020 is applicable except as follows.

##### *Replacement:*

This part of IEC 61439 defines the specific requirements for assemblies for the following applications: marinas, camping sites, market squares and electric vehicle charging stations as follows:

- assemblies for which the rated voltage does not exceed 1 000 V AC or 1 500 V DC;
- assemblies intended for use in connection with the generation, transmission, distribution and conversion of electric energy, and for the control of electric energy consuming equipment;
- assemblies operated by ordinary persons (e.g. to plug and unplug of electrical equipment);
- assemblies intended to be installed and used in market squares, marinas, camping sites and other similar sites accessible to the public including temporary installations;
- assemblies intended for charging stations for electric vehicles (AEVCS) for Mode 3 and Mode 4. They are designed to integrate the functionality and additional requirements for electric vehicle conductive charging systems according to IEC 61851-1:2017.

NOTE 1 Throughout this document, the terms AMHS (see 3.1.701), ACCS (see 3.1.702), AMPS (see 3.1.703), AEVCS (see 3.1.704) are used for low-voltage switchgear and controlgear assemblies intended for use respectively in marinas and similar locations (AMHS), camping sites and similar locations (ACCS), market squares and other similar external public sites (AMPS) and charging stations (AEVCS). The term assemblies is used for indicating all these boards.

This document is not applicable to assemblies intended to be installed on board of ships, houseboats, pleasure crafts and similar vessels.

For the correct selection of the switching devices and components, the following standards apply:

- IEC 60364-7-709 (AMHS) or
- IEC 60364-7-708 (ACCS) or
- IEC 60364-7-740 (AMPS) or
- IEC 60364-7-722 (AEVCS).

This document applies to all assemblies whether they are designed, manufactured and verified on a one-off basis or fully standardised and manufactured in quantity.

The manufacturing and/or assembling can be carried out 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 circuit breakers, fuse switches, electronic equipment, which comply with their relevant product standards.

NOTE 2 Where electrical equipment is directly connected to public low-voltage supply system and equipped with an energy meter for billing of the legal provider of the low-voltage supply, additional particular requirements based on national regulations apply, if any.

This document does not apply to boxes and enclosures for electrical accessories for household and similar fixed electrical installations as defined in IEC 60670-24.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

Clause 2 of IEC 61439-1:2020 is applicable except as follows.

*Addition:*

IEC 60068-2-27, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*

IEC 60068-2-75, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 61439-1:2020, *Low-voltage switchgear and controlgear assemblies – Part 1: General rules*

IEC 62262:2002, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*

IEC 62262:2002/AMD1:2021

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61439-1:2020 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

Clause 3 of IEC 61439-1:2020 is applicable except as follows.

### 3.1 General terms

*Additional terms:*

#### 3.1.701

#### **low-voltage switchgear and controlgear assembly for marinas and harbour sites AMHS**

combination of one or more transforming or switching devices together with associated control, measuring, signaling, protective and regulating equipment, with all their internal electrical and mechanical interconnections and structural parts, designed and built for use in all marinas, harbors and similar sites