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REDLINE VERSION

Kopplingsutrustningar för högst 1000 V växelspanning eller 1500 V likspänning – Del 7: Särskilda fordringar på utrustning för småbåtshamnar, campingplatser, marknader och laddplatser för elfordon

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

En så kallad ”Redline version” (RLV) innehåller både standarden som fastställts som SS och en ändringsmarkerad IEC-standard. Alla tillägg och borttagningar sedan den tidigare utgåvan av IEC-standarderna är markerade med färg. Med en RLV sparar du mycket tid när du ska identifiera och bedöma aktuella ändringar i standarden. SEK Svensk Elstandard kan bara ge ut RLV i de fall den finns tillgänglig från IEC.



IEC 61439-7

Edition 2.0 2022-07
REDLINE VERSION

INTERNATIONAL STANDARD



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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.130.20

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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**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 61439-7:2018. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

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.

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

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

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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. The main document types developed by IEC are described in greater detail at 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:~~2014~~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 ~~outdoor public sites~~ 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 ~~may~~ can be carried out other than by the original manufacturer (see 3.10.1 of IEC 61439-1:~~2014~~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:~~2011~~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:~~2011~~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

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Low-voltage switchgear and controlgear assemblies –

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

Som svensk standard gäller europastandarden EN IEC 61439-7:2023. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61439-7:2023.

Nationellt förord

Europastandarden EN IEC 61439-7:2023

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61439-7, Second edition, 2022 - Low-voltage switchgear and controlgear assemblies – Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicles charging stations**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN IEC 61439-1, utg 3:2021

Tidigare fastställd svensk standard SS-EN IEC 61439-7, utg 1:2020 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2026-09-06.

ICS 29.130.20

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SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

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Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

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Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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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)

This European Standard was approved by CENELEC on 2023-09-06. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a Standardization Request addressed to CENELEC by the European Commission.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

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)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

The Annex ZA of EN IEC 61439-1:2021 applies with the following changes:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
<i>Add the following references:</i>				
IEC 60068-2-27	-	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	-
IEC 60068-2-75	-	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	-
IEC 61439-1	2020	Low-voltage switchgear and controlgear assemblies - Part 1: General rules	EN IEC 61439-1	2021
IEC 62262	2002	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	2002
+ AMD	2021		+ A1	2021

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Low-voltage switchgear and controlgear assemblies –
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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