

Irish Standard I.S. EN IEC 61439-7:2020

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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I.S. EN IEC 61439-7:2020

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National Foreword

I.S. EN IEC 61439-7:2020 is the adopted Irish version of the European Document EN IEC 61439-7:2020, 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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EUROPEAN STANDARD NORME EUROPÉENNE

EN IEC 61439-7

EUROPÄISCHE NORM

May 2020

ICS 29.130.20

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 61439-7:2018 + COR1:2019)

Ensembles d'appareillage à basse tension - Partie 7: Ensembles pour installations publiques particulières telles que les marinas, les terrains de camping, les marchés et les emplacements analogues et pour bornes de charge de véhicules électriques (IEC 61439-7:2018 + COR1:2019) Niederspannungs-Schaltgerätekombinationen - Teil 7: Schaltgerätekombinationen für bestimmte Anwendungen wie Marinas, Campingplätze, Marktplätze, Ladestationen für Elektrofahrzeuge (IEC 61439-7:2018 + COR1:2019)

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EN IEC 61439-7:2020 (E)

European foreword

The text of document 121B/74/FDIS, future edition 1 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 61439-7:2020.

The following dates are fixed:

•	latest date by which the document has to be implemented at national	(dop)	2020-11-01
	level by publication of an identical national standard or by endorsement		

• latest date by which the national standards conflicting with the (dow) 2023-05-01 document have to be withdrawn

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

IEC 60364-7-708	NOTE Harmonized as HD 60364-7-708
IEC 60364-7-709	NOTE Harmonized as HD 60364-7-709
IEC 60364-7-722	NOTE Harmonized as HD 60364-7-722
IEC 60364-7-740	NOTE Harmonized as HD 60364-7-740
IEC 60670-24	NOTE Harmonized as EN 60670-24
IEC 61439-3	NOTE Harmonized as EN 61439-3
IEC 61851-1:2017	NOTE Harmonized as EN IEC 61851-1:2019 (not modified)
IEC 61851-23	NOTE Harmonized as EN 61851-23

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.cenelec.eu.

Clause 2 of IEC 61439-1:2011 is applicable except as follows.

Addition:

Publication	<u>Year</u>	Title	<u>EN/HD</u>	<u>Year</u>
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	2011	Low-voltage switchgear and controlgear assemblies - Part 1: General rules	EN 61439-1	2011

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IEC 61439-7

Edition 1.0 2018-12

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 installations publiques particulières telles que les marinas, les terrains de camping, les marchés et les emplacements analogues et pour bornes de charge de véhicules électriques





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IEC 61439-7

Edition 1.0 2018-12

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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.
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International Standard 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 first edition cancels and replaces the relevant technical specification published in 2014. It constitutes a technical revision.

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

- a) a new classification of the stationary ASSEMBLIES in accordance with their mechanical resistance (5.702);
- b) a new Table 702 with the list of tests and relevant severities to which the ASSEMBLIES have to be subjected according to the classification mentioned at point a);

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- c) a new Annex (CC) with a new endurance test for the individual switching devices intended to be used in AEVSC, if they have not already been tested against this requirement;
- d) a general editorial review and a technical revision.

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

FDIS	Report on voting
121B/74/FDIS	121B/77/RVD

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

This standard is to be read in conjunction with IEC 61439-1:2011. The provisions of the general rules dealt with in IEC 61439-1:2011 are applicable to this standard where they are specifically cited. When this document states "addition", "modification" or "replacement", the relevant text in IEC 61439-1:2011 is to be adapted accordingly.

Subclauses that are numbered with a 701 (702, 703, etc.) suffix are additional to the same subclause in IEC 61439-1:2011.

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 standard, the term ASSEMBLY written in small capitals is defined in 3.1.1 of IEC 61439-1:2011.

The reader's attention is drawn to the fact that Annex EE lists all of the "in-some-country" clauses on differing practices of a less permanent nature relating to the subject of this standard

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 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 stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
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- amended.

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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 61439-1:2011 is applicable except as follows.

Replacement:

NOTE 1 Throughout this document, the terms AMHS (see 3.1.701), ACCS (see 3.1.702), AMPS (see 3.1.703), AEVCS (see 3.1.7704) are used for low-voltage switchgear and controlgear assemblies intended for use respectively in marinas and similar locations (AMHS), campsites 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 Part of IEC 61439 defines the specific requirements of ASSEMBLIES as follows:

- ASSEMBLIES for which the rated voltage does not exceed 1 000 V in the case of AC or 1 500 V in the case of 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. plug and unplug of electrical equipment);
- ASSEMBLIES intended to be installed and used in market squares, marinas, campsites and other similar outdoor public sites;
- 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.

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 manufacture and/or assembly may be carried out other than by the original manufacturer (see 3.10.1 of IEC 61439-1:2011).

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 a 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.



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