Irish Standard
I.S. EN 61439-5:2015&AC:2015

Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks

I.S. EN 61439-5:2015&AC:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 61439-5:2015&AC:2015 is the adopted Irish version of the European Document EN 61439-5:2015, Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61439-5

January 2015

ICS 29.130.20

Supersedes EN 61439-5:2011

English Version

Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks (IEC 61439-5:2014)

Ensembles d'appareillage à basse tension - Partie 5: Ensembles pour réseaux de distribution publique (IEC 61439-5:2014)

Niederspannungs-Schaltgerätekombinationen - Teil 5: Schaltgerätekombinationen in öffentlichen Energieverteilungsnetzen (IEC 61439-5:2014)

This European Standard was approved by CENELEC on 2014-09-29. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 61439-5:2015 E

Foreword

The text of document 17D/492/CDV, future edition 2 of IEC 61439-5, prepared by SC 17D "Low-voltage switchgear and controlgear assemblies" of IEC/TC 17 "Switchgear and controlgear" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61439-5:2015.

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)	2015-07-23
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-09-29

This document supersedes EN 60439-5:2011.

This standard is to be read in conjunction with EN 61439-1.

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

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive.

For the relationship with EU Directive see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 61439-5:2014 was approved by CENELEC as a European Standard without any modification.

In the Bibliography of EN 61439-1:2011, the following note has to be **added** for the standard indicated:

ISO 9223	NOTE	Harmonised as EN ISO 9223.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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

NOTE 1 When 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.

Annex ZA of* EN 61439-1:2011 *applies, except as follows:

Publication	Year	Title	EN/HD	Year
Addition:				
IEC 60695-11-10	2013	Fire hazard testing -- Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	2013
IEC 61439-1	2011	Low-voltage switchgear and controlgear assemblies -- Part 1: General rules	EN 61439-1	2011
ISO 6506-1	-	Corrosion of metals and alloys - Corrosivity of atmospheres - Classification, determination and estimation	EN ISO 6506-1	-

Annex ZZ
(informative)

Coverage of Essential Requirements of EU Directive 2004/108/EC

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers all relevant essential requirements as given in Article 1 of Annex I of the EU Directive 2004/108/EC.

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directive concerned.

WARNING: Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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IEC 61439-5
Edition 2.0 2014-08

Low-voltage switchgear and controlgear assemblies –

Part 5: Assemblies for power distribution in public networks

IEC 61439-5
Édition 2.0 2014-08

Ensembles d'appareillage à basse tension –

Partie 5: Ensembles pour réseaux de distribution publique

CORRIGENDUM 1

Figure 104 – Diagram of test to verify the resistance to static load

Replace the existing figure by the following new figure:

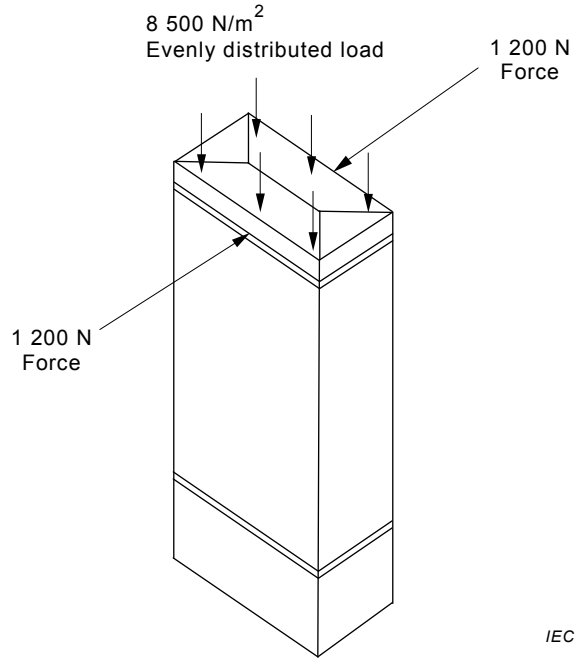

Figure 104 – Diagram of test to verify the resistance to static load

La correction concerne l'anglais seulement.

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Low-voltage switchgear and controlgear assemblies – Part 5: Assemblies for power distribution in public networks

Ensembles d'appareillage à basse tension – Partie 5: Ensembles pour réseaux de distribution publique

IEC 61439-5:2014-08(en-fr)

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IEC 61439-5

Edition 2.0 2014-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Low-voltage switchgear and controlgear assemblies – Part 5: Assemblies for power distribution in public networks

Ensembles d'appareillage à basse tension – Partie 5: Ensembles pour réseaux de distribution publique

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES –

Part 5: Assemblies for power distribution in public networks

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 61439-5 has been prepared by subcommittee 17D: Low-voltage switchgear and controlgear assemblies, of IEC technical committee 17: Switchgear and controlgear.

This second edition cancels and replaces the first edition published in 2010. It constitutes a technical revision.

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

– confirmation that tests carried out on the most onerous PENDA are deemed to verify the performance of similar and less onerous assemblies of the same general construction and rating;
– more precise timing/conditions for impact force withstand tests for PENDAs designed for operation in an arctic climate;
– correction of the direction of the applied force in the static load test.

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

CDV	Report on voting
17D/492/CDV	121B/13/RVC

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

This standard is to be read in conjunction with IEC 61439-1. The provisions of the general rules dealt with in IEC 61439-1 (hereinafter referred to as Part 1) are only applicable to this standard insofar as they are specifically cited. When this standard states “addition”, “modification” or “replacement”, the relevant text in Part 1 is to be adapted accordingly.

Subclauses that are numbered with a 101 (102, 103 etc.) suffix are additional to the same subclause in Part 1.

Tables and figures in this Part 5 that are new are numbered starting with 101.

New annexes in this Part 5 are lettered AA, BB, etc.

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

The reader’s attention is drawn to the fact that Annex DD 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.

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

The contents of the corrigendum of March 2015 have been included in this copy.

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES –

Part 5: Assemblies for power distribution in public networks

1 Scope

This part of IEC 61439 defines the specific requirements for public electricity network distribution assemblies (PENDAs).

PENDAs have the following criteria:

– used for the distribution of electrical energy in three phase systems for which the rated voltage does not exceed 1 000 V a.c. (see Figure 101 for a typical distribution network);

– stationary;

– open ASSEMBLIES are not covered by this standard;

– suitable for installation in places where only skilled persons have access for their use, however, outdoor types may be installed in situations that are accessible to ordinary persons;

– for indoor or outdoor use.

The object of this standard is to state the definitions and to specify the service conditions, construction requirements, technical characteristics and tests for PENDAs. Network parameters may require tests at higher performance levels.

PENDAs may also include control and or signalling devices associated with the distribution of electrical energy.

This standard applies to all PENDAs whether they are designed, manufactured 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 standard does not apply to individual devices and self-contained components, such as motor starters, fuse switches, electronic equipment, etc. which comply with the relevant product standards.

This standard does not apply to specific types of ASSEMBLIES covered by other parts of IEC 61439 series.