SVENSK STANDARD SS-EN 62683

Fastställd	Utgåva	Sida	Ansvarig kommitté
2016-01-13	2	1 (1+112)	SEK TK 121A

Kopplingsapparater för högst 1000 V – Produktdata och produktegenskaper för informationsutbyte

Low-voltage switchgear and controlgear – Product data and properties for information exchange

Som svensk standard gäller europastandarden EN 62683:2015. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62683:2015.

Nationellt förord

Europastandarden EN 62683:2015

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 62683, Second edition, 2015 - Low-voltage switchgear and controlgear - Product data and properties for information exchange**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 62683, utgåva 1, 2013, gäller ej fr o m 2018-10-02.

ICS 29.130.20

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

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

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

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!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

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

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62683

November 2015

ICS 29.130.20

Supersedes EN 62683:2013

English Version

Low-voltage switchgear and controlgear - Product data and properties for information exchange (IEC 62683:2015)

Appareillage à basse tension - Données et propriétés de produits pour l'échange d'informations (IEC 62683:2015)

Niederspannungsschaltgeräte - Produktdaten und -eigenschaften für den Informationsaustausch (IEC 62683:2015)

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 62683:2015 E

SEK Svensk Elstandard

European foreword

The text of document 121A/47/FDIS, future edition 2 of IEC 62683, prepared by SC 121A "Low-voltage switchgear and controlgear" 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 62683:2015.

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) 2016-07-02
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-10-02

This document supersedes EN 62683:2013.

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.

Endorsement notice

The text of the International Standard IEC 62683:2015 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 standards indicated:

IEC 60127-1	NOTE	Harmonized as EN 60127-1.
IEC 60715	NOTE	Harmonized as EN 60715.
IEC 60947-2:2006	NOTE	Harmonized as EN 60947-2:2006 (not modified).
IEC 60947-3	NOTE	Harmonized as EN 60947-3.
IEC 60947-4-1:2009 and A1:2012	NOTE	Harmonized as EN 60947-4-1:2010 (not modified) and as EN 60947-4-1:2010/A1:2012 (not modified).
IEC 60947-4-2:2011	NOTE	Harmonized as EN 60947-4-2:2012 (not modified).
IEC 60947-4-3	NOTE	Harmonized as EN 60947-4-3.
IEC 60947-5-1:2003	NOTE	Harmonized as EN 60947-5-1:2004 (not modified).
IEC 60947-5-2:2007	NOTE	Harmonized as EN 60947-5-2:2007 (not modified).
IEC 60947-5-4	NOTE	Harmonized as EN 60947-5-4.

IEC 60947-6-1:2005	NOTE	Harmonized as EN 60947-6-1:2005 (not modified).
IEC 60947-6-2	NOTE	Harmonized as EN 60947-6-2.
IEC 60947-7-1:2009	NOTE	Harmonized as EN 60947-7-1:2009 (not modified).
IEC 60947-7-2:2009	NOTE	Harmonized as EN 60947-7-2:2009 (not modified).
IEC 60947-7-3:2009	NOTE	Harmonized as EN 60947-7-3:2009 (not modified).
IEC 60947-8	NOTE	Harmonized as EN 60947-8.
IEC 60999-1:1999	NOTE	Harmonized as EN 60999-1:2000 (not modified).
IEC 61058-1:2000	NOTE	Harmonized as EN 61058-1:2002 (modified).
IEC 61095	NOTE	Harmonized as EN 61095.
IEC 61140:2001	NOTE	Harmonized as EN 61140:2002 (not modified).
IEC 61672-1:2013	NOTE	Harmonized as EN 61672-1:2013 (not modified).
IEC 61987-10	NOTE	Harmonized as EN 61987-10.
IEC 62262:2002	NOTE	Harmonized as EN 62262:2002 (not modified).
IEC 82079-1:2012	NOTE	Harmonized as EN 82079-1:2012 (not modified).
ISO 13850:2006	NOTE	Harmonized as EN ISO 13850:2008 (not modified).
ISO 14025	NOTE	Harmonized as EN ISO 14025.

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.

Publication	Year	Title	EN/HD	Year
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
-	-		+ corrigendum May	1993
IEC 60947-1	2007	Low-voltage switchgear and controlgear - Part 1: General rules	EN 60947-1	2007
+ A1	2010		+ A1	2011
+ A2	2014		+ A2	2014
IEC 61360-1	-	Standard data elements types with associated classification scheme for electric items - Part 1: Definitions - Principles and methods	EN 61360-1	-

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR – PRODUCT DATA AND PROPERTIES FOR INFORMATION EXCHANGE

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

International Standard IEC 62683 has been prepared by subcommittee 121A: Low-voltage switchgear and controlgear, of the IEC technical committee 121: Switchgear and controlgear and their assemblies for low voltage.

This second edition cancels and replaces the first edition published in 2013. This edition constitutes a technical revision.

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

a) new descriptions of 41 classes for the families of circuit-breakers and their associated devices (ACC2xx), switches and disconnectors (ACC3xx), control switches (ACC5xx) and terminal blocks (ACC7xx) in addition to 14 classes for motor-starters of the first edition;
b) new associated properties and value lists necessary for the new classes;
c) three new blocks of properties: ACC017 Head of the control circuit device, ACC018 Light block of the control circuit device and ACC041 Over-current release;

d) use of LEVEL_TYPE for replacing minimum and maximum properties into a single property with two values.

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

FDIS	Report on voting
121A/47/FDIS	121A/53/RVD

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.

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,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

Mainly large customers and wholesalers are requesting standardized product descriptions and product properties from product manufacturers. However, all stakeholders will benefit from this standardised presentation and data exchange.

Multiple associations or groups of actors launched different initiatives to try to respond to this demand but, due to the lack of standardisation of classes and properties, the situation is not satisfactory neither for customers nor for manufacturers.

In order to keep the lead of product description, IEC proposes a new consistent solution within its product standards.

The purpose of this International Standard is to:

- define device classes and properties for low-voltage switchgear and controlgear in a dedicated standard,
- provide a basis for introduction of the low-voltage switchgear and controlgear classes and properties into the IEC 61360 database maintained by IEC/SC3D (see http://std.iec.ch/iec61360).

This standard is not intended to establish a hierarchy of product classes called classification.

The intended benefits of this standard are to:

- reduce the time and efforts of mapping data for each customer request;
- optimize the workflow of B2B exchanges;
- minimize duplication of articles in customer inventories and in databases;
- minimize losses and misinterpretation of data during exchanges;
- facilitate the selection of a product, especially regarding reliability and safety;
- give access to product data everywhere regardless of country, language and culture;
- provide product data related to environmental aspects such as material declaration;
- contribute to the fast growth of the e-business by simplifying the development of:
  - e-Catalogue allowing the differentiation of products performances, certifications and approvals, etc;
  - e-commerce: use of electronic networks to exchange information, products, services and payments for commercial and communication purposes between individuals (consumers) and businesses, between businesses themselves.

The output of this standard consists of:

- reference dictionary of low-voltage switchgear and controlgear using existing terms from IEC standards. However, terminology used in e-business may be relevant for the purpose of naming classes in this standard to get a high level of acceptance;
- properties for e-commerce purposes, conformity of properties with product standards being the main goal of this standard.

NOTE The classes "under consideration" are for information only and are intended to be completed during the next maintenance cycle.

For this project, the introduction of low-voltage switchgear and controlgear within the IEC 61360 database needs to address the following technical aspect:

- IEC 61360 requires mandatory attributes. The complete set of mandatory attributes with additional relevant attributes for low-voltage switchgear and controlgear will be available within the IEC 61360 database. At the development stage, the CDD 62683 database is

available at the following address: http://std.iec.ch/cdd/iec62683/cdddev.nsf/Welcome?OpenPage . Within the present document, only the most useful attributes will be presented;

- The switchgear and controlgear data model is implemented in an appropriate domain of the IEC Component Data Dictionary (CDD), IEC 61360, by creating dictionaries of blocks, classes and properties.

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR – PRODUCT DATA AND PROPERTIES FOR INFORMATION EXCHANGE

1 Scope

This International Standard establishes the reference dictionary of the general description of low-voltage switchgear and controlgear classes based on defined properties.

This dictionary is used to facilitate the exchange in electronic format of data describing low-voltage switchgear and controlgear.

This standard provides clear and unambiguous definitions of a limited number of properties and classes which are mainly used for presentation, selection and identification of products particularly in electronic catalogues.

Each property has an unambiguously defined meaning and naming, and where relevant, a defined value list, a defined format and a defined unit.

The intention is not to cover manufacturer specific features.

2 Normative references

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.

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 60947-1:2007, *Low-voltage switchgear and controlgear – Part 1: General rules*
IEC 60947-1:2007/AMD1:2010
IEC 60947-1:2007/AMD2:2014

IEC 61360-1, *Standard data element types with associated classification scheme for electric items – Part 1: Definitions – Principles and methods*