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Elutrustning – Märkning med avseende på matning – Säkerhet

*Marking of electrical equipment with ratings related to electrical supply –
Safety requirements*

Som svensk standard gäller europastandarden EN IEC 61293:2020. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61293:2020.

Nationellt förord

Europastandarden EN IEC 61293:2020

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61293, Second edition, 2019 - Marking of electrical equipment with ratings related to electrical supply - Safety requirements**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61293, utgåva 1, 1995, gäller ej fr o m 2023-04-10.

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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English Version

**Marking of electrical equipment with ratings related to electrical
supply - Safety requirements
(IEC 61293:2019)**

Marquage des matériels électriques avec des
caractéristiques assignées relatives à l'alimentation
électrique - Exigences de sécurité
(IEC 61293:2019)

Kennzeichnung elektrischer Betriebsmittel mit
Bemessungsdaten für die Stromversorgung -
Anforderungen für die Sicherheit
(IEC 61293:2019)

This European Standard was approved by CENELEC on 2019-10-21. 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, 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: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 3/1404/FDIS, future edition 2 of IEC 61293, prepared by IEC/TC 3 "Information structures and elements, identification and marking principles, documentation and graphical symbols" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61293:2020.

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) 2020-10-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-04-10

This document supersedes EN 61293:1994 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 mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

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

Endorsement notice

The text of the International Standard IEC 61293:2019 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 60038	NOTE	Harmonized as EN 60038
IEC 60068-2-70	NOTE	Harmonized as EN 60068-2-70

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	series	Letters symbols to be used in electrical technology	EN 60027	series
IEC 60417	1973 ¹	Graphical symbols for use on equipment. Index, survey and compilation of the single sheets.	-	-
IEC 60445	-	Basic and safety principles for man-machine interface, marking and identification - Identification of equipment terminals, conductor terminations and conductors	EN 60445	2017
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
			/corrigendum May 1993	1993
-	-		+A1	2000
-	-		/AC	2016
-	-		+A2	2013
-	-		+A2/AC	2019
IEC 60617	2005 ¹	Standard data element types with associated classification scheme for electric components -- Part 4: IEC reference collection for standard data element types and component classes	-	-
IEC 61082-1	2014	Preparation of documents used in electrotechnology - Part 1: Rules	EN 61082-1	2015
IEC 61140	-	Protection against electric shock - Common aspects for installation and equipment	EN 61140	2016
IEC 80000	series	Quantities and units	EN 80000	series

¹ Dated as no equivalent European Standard exists.

EN IEC 61293:2020 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 7000	2019 ¹	Graphical symbols for use on equipment - Registered symbols	-	-
ISO 80000	series	Quantities and units	EN ISO 80000	series

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARKING OF ELECTRICAL EQUIPMENT WITH RATINGS RELATED
TO ELECTRICAL SUPPLY – SAFETY REQUIREMENTS**

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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- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 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 61293 has been prepared by IEC technical committee 3: Information structures and elements, identification and marking principles, documentation and graphical symbols.

This second edition cancels and replaces the first edition published in 1994. This edition constitutes a technical revision.

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

- a) its status as a basic safety publication has been removed, and it has become a horizontal publication in accordance with IEC Guide 108;
- b) the scope is extended to include the applicability of this document to product manufacturers;
- c) the addition of a provision that the visibility of the marking during normal operation should be considered;

- d) more detailed requirements where equipment has a set or range of rated values for a given characteristic;
- e) requirements regarding the provision of the markings also in the technical documentation have been added;
- f) some notes have been converted to normative text;
- g) normative references and references to other standards have been updated.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
3/1404/FDIS	3/1414/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 document has been drafted in accordance with the ISO/IEC Directives, Part 2.

It has the status of a horizontal standard in accordance with IEC Guide 108.

The reader's attention is drawn to the fact that Table B.1 of Annex B lists all of the "in-some-country" clauses on differing practices of a less permanent nature relating to the subject of this standard.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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

MARKING OF ELECTRICAL EQUIPMENT WITH RATINGS RELATED TO ELECTRICAL SUPPLY – SAFETY REQUIREMENTS

1 Scope

This International Standard establishes minimum requirements and general rules on marking electric equipment with ratings and other characteristics to enable the proper and safe selection and installation of electric equipment related to any supply of electricity.

The object of this document is to:

- provide general requirements for the marking of the characteristics related to any supply system, such as voltage, current, frequency and power, without any restrictions;
- provide technical committees with uniform methods for the marking of electrical ratings of products.

This document is primarily intended for application by technical committees when specifying minimum markings of ratings related to any electrical supply of equipment, sub-assemblies and components, but it is also for application by product manufacturers for marking their products.

NOTE For further markings see ISO/IEC Guide 51.

This horizontal standard is primarily intended for use by technical committees in the preparation of standards in accordance with the principles laid down in IEC Guide 108.

One of the responsibilities of a technical committee is, wherever applicable, to make use of horizontal standards in the preparation of its publications. The contents of this horizontal standard will not apply unless specifically referred to or included in the relevant publications.

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.

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60417, *Graphical symbols for use on equipment* (available at <http://www.graphical-symbols.info/equipment>)

IEC 60445, *Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals, conductor terminations and conductors*

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

IEC 60617, *Graphical symbols for diagrams* (available at <http://std.iec.ch/iec60617>)

IEC 61082-1:2014, *Preparation of documents used in electrotechnology – Part 1: Rules*

IEC 61140, *Protection against electric shock – Common aspects for installation and equipment*

IEC 80000 (all parts), *Quantities and units*

ISO 7000, *Graphical symbols for use on equipment – Registered symbols*

ISO 80000 (all parts), *Quantities and units*