

Irish Standard I.S. EN IEC 61293:2020

Marking of electrical equipment with ratings related to electrical supply -Safety requirements

© CENELEC 2020 No copying without NSAI permission except as permitted by copyright law.

I.S. EN IEC 61293:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R.~xxx: Standard~Recommendation-recommendation~based~on~the~consensus~of~an~expert~panel~and~subject~to~public~consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

Published:

EN IEC 61293:2020

2020-04-10

This document was published under the authority of the NSAI

ICS number:

and comes into effect on:

29.020

2020-04-29

NOTE: If blank see CEN/CENELEC cover page

NSAI T +353 1 807 3800 Sales:

1 Swift Square, Northwood, Santry F+353 1 807 3838 E standards@nsai.ie T+353 1 857 6730 F+353 1 857 6729

Dublin 9

W NSAl.ie

W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

National Foreword

I.S. EN IEC 61293:2020 is the adopted Irish version of the European Document EN IEC 61293:2020, Marking of electrical equipment with ratings related to electrical supply - Safety requirements

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

For relationships with other publications refer to the NSAI web store.

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.

This is a free page sample. Access the full version online.

This page is intentionally left blank

This is a free page sample. Access the full version online. I.S. EN IEC 61293:2020

EUROPEAN STANDARD

EN IEC 61293

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2020

ICS 29.020

Supersedes EN 61293:1994 and all of its amendments and corrigenda (if any)

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

EN IEC 61293:2020 (E)

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
- 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.

D 1 " "		T''	ENTITE	
<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60027	series	Letters symbols to be used in electrical technology	EN 60027	series
IEC 60417	1973¹	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
		N	/corrigendum May 1993	1993
-	-		+A1	2000
-	-		/AC	2016
-	-		+A2	2013
-	-		+A2/AC	2019
IEC 60617	20051	Standard data element types with associated classification scheme for electric components Part 4: IEC reference collection fo 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.

_

This is a free page sample. Access the full version online. **I.S. EN IEC 61293:2020**

EN IEC 61293:2020 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<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

EN IEC 61293:2020 (E)

Annex ZZ

(informative)

Relationship between this European Standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Table ZZ.1 – Correspondence between this European Standard and Annex I of Directive 2014/35/EU [2014 OJ L96]

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
Annex 1,1(a)	Clause 4	

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

This is a free page sample. Access the full version online.

This page is intentionally left blank



IEC 61293

Edition 2.0 2019-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE

HORIZONTAL STANDARD

NORME HORIZONTALE

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

Marquage des matériels électriques avec des caractéristiques assignées relatives à l'alimentation électrique – Exigences de sécurité





THIS PUBLICATION IS COPYRIGHT PROTECTED Copyright © 2019 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'IEC ou du Comité national de l'IEC du pays du demandeur. Si vous avez des questions sur le copyright de l'IEC ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de l'IEC de votre pays de résidence.

IEC Central Office Tel.: +41 22 919 02 11

3, rue de Varembé info@iec.ch CH-1211 Geneva 20 www.iec.ch

Switzerland

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigendum or an amendment might have been published.

IEC publications search - webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and once a month by email.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 000 terminological entries in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

67 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

A propos de l'IEC

La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

A propos des publications IEC

Le contenu technique des publications IEC est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

Recherche de publications IEC - webstore.iec.ch/advsearchform

La recherche avancée permet de trouver des publications IEC en utilisant différents critères (numéro de référence, texte, comité d'études,...). Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

IEC Just Published - webstore.iec.ch/justpublished

Restez informé sur les nouvelles publications IEC. Just Published détaille les nouvelles publications parues. Disponible en ligne et une fois par mois par email.

Service Clients - webstore.iec.ch/csc

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: sales@iec.ch.

Electropedia - www.electropedia.org

Le premier dictionnaire d'électrotechnologie en ligne au monde, avec plus de 22 000 articles terminologiques en anglais et en français, ainsi que les termes équivalents dans 16 langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (IEV) en ligne.

Glossaire IEC - std.iec.ch/glossary

67 000 entrées terminologiques électrotechniques, en anglais et en français, extraites des articles Termes et Définitions des publications IEC parues depuis 2002. Plus certaines entrées antérieures extraites des publications des CE 37, 77, 86 et CISPR de l'IEC.



IEC 61293

Edition 2.0 2019-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE

HORIZONTAL STANDARD

NORME HORIZONTALE

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

Marquage des matériels électriques avec des caractéristiques assignées relatives à l'alimentation électrique – Exigences de sécurité

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.020 ISBN 978-2-8322-7252-7

Warning! Make sure that you obtained this publication from an authorized distributor.

Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

- 2 - IEC 61293:2019 © IEC 2019

CONTENTS

ΓL	JKEWUKU		3
1	Scope		5
2	•	ve references	
3		nd definitions	
4		requirements	
	ŭ	sic requirements	
		rking of electric equipment with its characteristics	
	4.2.1	General	
	4.2.2	Characteristics of the supply system	
	4.2.3	Rated values of equipment	
	4.2.4	Other characteristics	
	4.2.5	Sequence of rated values and other characteristics	
		presentation of values	
	4.3.1	General	
	4.3.2	Single value	10
	4.3.3	Limit values	
	4.3.4	Two and more values	10
	4.3.5	Range of values	11
	4.3.6	Tolerances	11
5	Consiste	ncy of marking presentation	11
6	Applicat	on	12
Ar	nex A (info	rmative) Examples	13
		ormative) List of notes concerning certain countries	
	5 1 7		
Ta	ıble A 1 – F	examples of markings for electric equipment with ratings related to supply	
of	electricity.		13
Та	ıble A.2 – E	xamples of letter notations and graphical symbols	14
Та	ıble B.1 – N	lotes concerning certain countries	15

IEC 61293:2019 © IEC 2019

- 3 -

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.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 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

- 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;

- 4 - IEC 61293:2019 © IEC 2019

- 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.

IEC 61293:2019 © IEC 2019

- 5 -

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



	This is a free preview.	Purchase the e	entire publication	at the link below:
--	-------------------------	----------------	--------------------	--------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation