ELEKTRISEADMETE MÄRGISTAMINE ELEKTRIVARUSTUSEGA SEOTUD TUNNUSANDMETEGA. OHUTUSNÕUDED

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



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-E sisaldab Euroopa standardi ingliskeelset teksti.		This Estonian standard EVS-EN IEC 61293:2020 consists of the English text of the European standard EN IEC 61293:2020.
Standard on jõustunud avaldamisega EVS Teatajas.	sellekohase teat	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorgan Euroopa standardi rahv kättesaadavaks 10.04.2020.		Date of Availability of the European standard is 10.04.2020.
Standard on kär Standardikeskusest.	tesaadav Ees	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 29.020

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN IEC 61293

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

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

5/15

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>	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
			/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 fo standard data element types and component classes	6,	-
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.

-

Publication Publication	<u>Year</u>	<u>Title</u>		EN/HD	<u>Year</u>
SO 7000	2019 ¹	Graphical symbols for use on e Registered symbols	quipment -	-	-
SO 80000	series	Quantities and units		EN ISO 80000	series
9.					
	C. M.				
	6				
	(
	•	7x			
		٠٠,			
		O COLOR			
		0,			
		2			
		, (
			0.		
			72		
			(0)		
				9	
				6	
				6	
				6	
				60	
				6	
				6	
				6	
				6	

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.

CONTENTS

FOREWO)RD	3
1 Scop	pe	5
2 Norn	native references	5
	ns and definitions	
	king requirements	
4.1	Basic requirements	
4.1 4.2	Marking of electric equipment with its characteristics	
4.2 4.2.1		
4.2.1		
4.2.3	1133	
4.2.4		
4.2.4		
4.2.3	Representation of values	
4.3 4.3.1		
4.3.1		
4.3.2	9	
4.3.4		
4.3.4		
4.3.6		
	sistency of marking presentation	
6 Appl	ication	12
	(informative) Examples	
	(informative) List of notes concerning certain countries	
Bibliograp	phy	16
Table A 1	– Examples of markings for electric equipment with ratings related to supply	
	city	13
Table A.2	2 – Examples of letter notations and graphical symbols	14
Table D. I	- Notes concerning certain countries	13
	0 ,	
		()
	- Notes concerning certain countries	

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 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;