



SLOVENSKI STANDARD
kSIST FprEN 62115:2016/oprAA:2018
01-oktober-2018

Električne igrače - Varnost - Dopolnilo AA

Electric toys - Safety

Elektrische Spielzeuge - Sicherheit

Jouets électriques - Sécurité

Ta slovenski standard je istoveten z: FprEN 62115:2016/prAA:2018

ICS:

13.120	Varnost na domu	Domestic safety
97.200.50	Igrače	Toys

kSIST FprEN 62115:2016/oprAA:2018 en,fr

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
FprEN 62115:2016
prAA

August 2018

ICS 13.120; 97.200.50

English Version

Electric toys - Safety

Jouets électriques - Sécurité

Elektrische Spielzeuge - Sicherheit

This draft amendment prAA, if approved, will modify the European Standard FprEN 62115:2016; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2018-10-26.

It has been drawn up by CLC/TC 61.

If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

This draft amendment was established by CENELEC 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

CONTENTS

1		
2	European foreword	4
3	Introduction	6
4	1 Scope	6
5	2 Normative references	8
6	4 General requirements	8
7	5. General conditions for tests	8
8	5.2 Preconditioning	8
9	7. Marking and Instructions	8
10	7.1 General	8
11	7.2 Markings on electric toys	8
12	7.3 Markings on Packaging and Instructions	9
13	7.5 Instructions for electric ride-on toys	9
14	7.6 Temperature warnings	9
15	9 Heating and abnormal operation	9
16	9.9 Fault conditions in electronic circuits	9
17	9.10 Compliance criteria	9
18	13 Constructions	9
19	13.4 Batteries	9
20	13.4.1 Small batteries	9
21	13.6 Charging batteries	10
22	13.10 Speed limitation of electric ride-on toys	10
23	15 Components	10
24	18 Resistance to heat and fire	10
25	18.1 Resistance to heat	10
26	Annex I	10
27	Annex J	10
28	Bibliography	11
29	Annex ZA (normative) Normative references to International publications with their	
30	corresponding European publications	12
31	Annex ZB (informative) Background and rationale for this European Standard	17
32	ZB.1 General	17
33	ZB.2 Rationale	17
34	1. Scope	17
35	5. General conditions for tests	17
36	6. Criteria for reduced testing	17
37	7. Marking and Instructions	18
38	8. Power input	19
39	9. Heating and abnormal operation	19
40	10 Electric Strength	21
41	11 Electric toys used in water, electric toys used with liquid and electric toys cleaned with	
42	liquid	21

43	12 Mechanical strength	21
44	13 Construction	21
45	14 Protection of cords and wires	24
46	15 Components	24
47	16 Screws and connections	25
48	17 Clearance and creepage distances	25
49	18 Resistance to heat and fire	25
50	19 Radiation, toxicity and similar hazards	25
51	Annex A Experimental sets (normative)	26
52	Annex B Needle flame test (normative)	26
53	Annex C Automatic controls and switches (normative)	26
54	Annex D Electric toys with protective electronic circuits (normative)	26
55	Annex E Safety of Electric Toys incorporating Optical Radiation Sources (normative)	27
56	Annex I Electric toys generating electromagnetic fields (normative)	27
57	Annex J Safety of remote-controls for electric ride-on toys	27
58	Annex J Clause 7 Marking and Instructions	27
59	Annex J Clause 9 Heating and Abnormal Operation	28
60	Annex J Clause 13 Construction	28
61	Annex ZZ (informative) Relationship between this European Standard and the essential	
62	requirements of Directive 2009/48/EC aimed to be covered	29
63		

64 **European foreword**

65 This European Standard (FprEN 62115:2016/prAA:2018) has been prepared by CLC/TC 61 "Safety of
66 household and similar electrical appliances".

67 This document is currently submitted to the Enquiry.

68 The following dates are proposed:

- latest date by which the existence (doa) dor + 6 months
of this document has to be
announced at national level
- latest date by which this document (dop) dor + 12 months
has to be implemented at national
level by publication of an identical
national standard or by
endorsement
- latest date by which the national (dow) dor + 36 months
standards conflicting with this
document have to be withdrawn (to be confirmed or
modified when voting)

69

70 EN 62115:201X will supersede EN 62115:2005.

71 This document has been prepared under a mandate given to CENELEC by the European Commission and
72 the European Free Trade Association and supports particular safety requirements of EC Directive
73 2009/48/EC.

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

75 NOTE 1 The following print types are used:

76 — requirements: in roman type;

77 — test specifications: in italic type;

78 — notes: in small roman type.

79 Words in bold in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the
80 associated noun are also in bold.

81 There are no special national conditions causing a deviation from this European Standard.

82 There are no national deviations from this European Standard.

83 Annexes ZA, ZB and ZZ have been added by CENELEC.

84

85

Text of prAA to FprEN 62115:2016

86

In Clause 4, 2nd paragraph replace “ISO 8124 series of standards” with “EN 71 series of standards”.

87

In 5.2, 5th paragraph and in the note replace “ISO 8124-1” with “EN 71-1:2014+A1:2018”.

88

In 7.3.2, 3rd paragraph replace “ISO 8124-1” with “EN 71-1:2014+A1:2018”.

89

In 7.6, 3rd paragraph replace “ISO 8124-1:2014” with “EN 71-1:2014+A1:2018”.

90

In 13.4.1, 1st paragraph replace “5.2 of 8124-1:2014” with 8.2 of EN 71-1:2014+A1:2018”.

91

In 13.10, 1st paragraph replace “4.23 of ISO 8124-1:2014” with “5.6 of EN 71-1:2014+A1:2018”.

92

In 13.10, 2nd paragraph replace “5.17 of ISO 8124-1:2014” with “8.29 of EN 71-1:2014+A1:2018”.

93

In 19.1, note, replace “ISO 8124 series of standards” with “EN 71 series of standards”.

94

In Clause 9.J.1.1, 2nd and 4th paragraph replace “4.21(b) and 5.16.2 of ISO 8124-1:2014” with “4.15.1.5 and 8.26.1 of EN 71-1:2014+A1:2018”.

95

96

In Clause 13.J.1.1, 2nd paragraph replace “4.21(b) and 5.16.2 of ISO 8124-1:2014” with “4.15.1.5 and 8.26.1 of EN 71-1:2014+A1:2018”.

97

98

In Clause 13.J.1.1, 4th paragraph, item d) replace “4.21(b) and 5.16.2 of ISO 8124-1:2014” with “4.15.1.5 and 8.26.1 of EN 71-1:2014+A1:2018”.

99

100

In 7.3.2, 2nd paragraph replace “WARNING” with “Warning”.

101

In 7.3.3.1, 4th paragraph replace “WARNING” with “Warning”.

102

In 7.3.3.2, 1st, 3rd and 4th paragraph replace “WARNING” with “Warning”.

103

In 7.3.3.3, 1st paragraph replace “WARNING” with “Warning”.

104

In 7.5, 1st paragraph replace “WARNING” with “Warning”.

105

In 7.5, 2nd paragraph replace “WARNING” with “Warning”.

106

In 7.6, 1st and 5th paragraph replace “WARNING” with “Warning”.

107

In Annex A, Clause 7.3.4, 1st paragraph replace “WARNING” with “Warning”.

108

In Annex E, Clause 19.E.5, 1st paragraph replace “WARNING” with “Warning”.

109

In Annex J, Clause 7.J.1.2, 2nd paragraph replace “WARNING” with “Warning”.

110 Introduction

111 If the IEC Foreword or parts of it is used in the EN Foreword, the following applies: *Replace the 8th*
112 *paragraph by the following:*

113 Other safety aspects of electric toys are described in the EN 71 series of standards.

114 *Delete the 10th paragraph.*

115 *Delete “IEC” or replace it where appropriate by “CLC”.*

116 1 Scope

117 *Replace the scope by the following:*

118 This European Standard specifies safety requirements for **toys** that have at least one function
119 dependant on electricity, **electric toys** being any product designed or clearly intended, whether or
120 not exclusively, for use in play by children of less than 14 years of age.

121 NOTE 1 Examples of **electric toys** also within the scope of this standard are

122 - constructional sets;

123 - **experimental sets**;

124 - functional **electric toys** (an **electric toy** which performs and is used in the same way as a product, appliance or
125 installation intended for use by adults, and which may be a scale model of such product, appliance or
126 installation);

127 - **electric toy** computers;

128 - A doll's house having an interior lamp

129 Additional requirements for **experimental sets** are given in Annex A.

130 Additional requirements for **electric toys** incorporating optical radiation sources are given in Annex
131 E.

132 Measurement methods for **electric toys** generating Electromagnetic fields (EMF) are given in
133 Annex F.

134 Additional requirements for the safety of remote-controls for **electric ride-on toys** are given in
135 Annex J.

136 If the packaging is intended to have play value, then it is considered to be part of the **electric toy**.

137 This European Standard only covers the safety aspects of **electric toys** that relate to an electrical
138 function.

139 NOTE 2 The EN 71 series of standards address other aspects of the safety of **toys**. Other horizontal product standards
140 may also apply to **toys**.

141 This standard covers the safety of **electric toys** taking power from any source, such as batteries,
142 transformers, solar cells and inductive connections.

143 NOTE 3 **Transformers for toys** (EN 61558-2-7:2007 for linear types or EN 61558-2-7:2007 and EN 61558-2-16:2013 for
144 switch mode types), **battery chargers** (EN 60335-2-29:2010) and **battery chargers** for use by children (EN 60335-2-
145 29:2010, Annex AA) are not considered to be part of an **electric toy** even if supplied with an **electric toy**.

146 NOTE 4 This standard is not intended to assess the safety of batteries however it does address the safety of the **toy** with
147 the batteries inserted.

148 This European Standard does not apply to the following toys:

- 149 - playground equipment intended for public use;
- 150 - automatic playing machines, whether coin operated or not, intended for public use;
- 151 - **toy** vehicles equipped with combustion engines;
- 152 - **toy** steam engines;
- 153 - slings and catapults;

154 Furthermore, it does not cover the following items, which, for the purposes of this European
155 Standard, are not considered toys:

- 156 - electric decorative robots (EN 50410);
- 157 - decorative objects for festivities and celebrations;
- 158 - products for collectors, provided that the product or its packaging bears a visible and legible
159 indication that it is intended for collectors of 14 years of age and above; examples of this
160 category are:
 - 161 1 detailed and faithful scale models (see A.2);
 - 162 2 kits for the assembly of detailed scale models;
 - 163 3 folk dolls and decorative dolls and other similar articles;
 - 164 4 historical replicas of toys;
 - 165 5 reproductions of real fire arms;
- 166 - sports equipment, including roller skates, inline skates, and skateboards intended for
167 children with a body mass of more than 20 kg;
- 168 - bicycles with a maximum saddle height of more than 435 mm, measured as the vertical
169 distance from the ground to the top of the seat surface, with the seat in a horizontal position
170 and with the seat pillar set to the minimum insertion mark;
- 171 - scooters and other means of transport designed for sport or which are intended to be used
172 for travel on public roads or public pathways;
- 173 - electrically driven vehicles which are intended to be used for travel on public roads, public
174 pathways, or the pavement thereof;
- 175 - aquatic equipment intended to be used in deep water, and swimming learning devices for
176 children, such as swim seats and swimming aids;
- 177 - puzzles with more than 500 pieces;
- 178 - guns and pistols using compressed gas, with the exception of water guns and water pistols;
- 179 - bows for archery over 120 cm long;
- 180 - products and games using sharp-pointed missiles, such as sets of darts with metallic points;
- 181 - functional educational products, such as electric ovens, irons or other functional products
182 operated at a nominal voltage exceeding 24 V which are sold exclusively for teaching
183 purposes under adult supervision;
- 184 - fireworks, including percussion caps which are not specifically designed for **electric toys**;
- 185 - products intended for use for educational purposes in schools and other pedagogical
186 contexts under the surveillance of an adult instructor, such as science equipment;
- 187 - electronic equipment, such as personal computers and game consoles, used to access
188 interactive software and their associated peripherals, unless the electronic equipment or the
189 associated peripherals are specifically designed for and targeted at children and have a play
190 value on their own, such as specially designed personal computers, key boards, joy sticks or
191 steering wheels;
- 192 - interactive software, intended for leisure and entertainment, such as computer games, and
193 their storage media, such as CDs;
- 194 - child-appealing luminaries;
- 195 - fashion accessories for children which are not for use in play;
- 196 - babies soothers;
- 197 - electric transformers for toys;
- 198 - fashion accessories for children which are not for use in play (see A.2);
- 199 - personal protective equipment including swimming goggles, sunglasses and other eye
200 protectors as well as bicycle and skateboard helmets;
- 201 - blowers for inflatable activity **toys** (such as blowers for bouncy castles);

202 **2 Normative references**203 *Add the following references:*204 EN 71-1:2014+A1:2018, *Safety of toys — Part 1: Mechanical and physical properties*205 EN 50410:2008 *Household and similar electrical appliances — Safety — Particular requirements for*
206 *decorative robots*207 **4 General requirements**208 *Replace in the note “ISO 8124” by “EN 71-1:2014+A1:2018”.*209 **5. General conditions for tests**210 **5.2 Preconditioning**211 *Replace the 2nd dash by the following:*

212 - Drop test

213 **7. Marking and Instructions**214 **7.1 General**215 *Delete the 1st paragraph.*216 **7.2 Markings on electric toys**217 **7.2.1 Identification**218 *Delete sub-clause 7.2.1 and replace with the following informative notes:*

219 "NOTE

220 The following bullet points include information about requirements in Directive 2009/48/EC, relating
221 to marking of toys and do not constitute requirements of this European Standard. The information is
222 not exhaustive and it is advised to consult Directive 2009/48/EC and the associated guidance
223 documents for further details.224 — The manufacturer's¹ name, registered trade name or registered trade mark and the address at
225 which the manufacturer can be contacted shall be indicated on the toy or, where that is not
226 possible, on its packaging or in a document accompanying the toy. This requirement applies also to
227 the name and address etc. of any importer².228 — Manufacturers shall ensure that their toys bear a type, batch, serial or model number or other
229 element allowing their identification, or where the size or nature of the toy does not allow it, that the
230 required information is provided on the packaging or in a document accompanying the toy.231 — Manufacturers and importers shall ensure that the toy is accompanied by instructions and safety
232 information in a language or languages easily understood by consumers, as determined by the Member
233 State concerned.234 — A Member State may, within its territory, stipulate that warnings and safety instructions shall be
235 written in a language or languages easily understood by consumers, as determined by that Member
236 State."

¹ A manufacturer is any natural or legal person who manufactures a toy or has a toy designed or manufactured, and markets that toy under his name or trademark.

² An importer is any natural or legal person established within the Community who places a toy from a third country on the Community market.

237 **7.2.6 Symbols**

238 *Modify the number of the symbol for Warning: Contains coin battery to (ISO 7010 W001 and IEC*
239 *60417 6367).*

240 **7.3 Markings on Packaging and Instructions**

241 **7.3.2 Transformer toys and power supply toys**

242 *Add the following note after the warning:*

243 *"NOTE Instead of 3 years 36 months can be used in the warning."*

244 *Replace the last sentence in the third paragraph by the following:*

245 *"This requirement does not apply to toys, which on account of their function, dimensions,*
246 *characteristics or properties, or on other cogent grounds, are manifestly unsuitable for children*
247 *under 36 months."*

248 **7.5 Instructions for electric ride-on toys**

249 *Delete the requirement and add following note:*

250 *"NOTE See EN 71-1:2014+A1:2018 for requirement for electric ride-on toys."*

251 **7.6 Temperature warnings**

252 *Replace "The text "Not suitable for children under 3 years" may be replaced by the age warning*
253 *symbol from Figure B.1 of ISO 8124-1." with "The text "Not suitable for children under 3 years" may*
254 *be replaced by the age warning symbol from 7.2 of EN 71-1:2014+A1:2018."*

255 **9 Heating and abnormal operation**

256 **9.9 Fault conditions in electronic circuits**

257 *Replace the 8th paragraph item f) including note 2 and 3 with the following:*

258 *"f) failure of microprocessors and integrated circuits except components such as thyristors and triacs. All*
259 *possible output signals are considered for faults occurring within the component. If it can be shown that a*
260 *particular output signal is unlikely to occur, then the relevant fault is not considered."*

261 **9.10 Compliance criteria**

262 *Replace "International Standard" by "standard" in the 4th dash of the test specification.*

263 **13 Constructions**

264 **13.4 Batteries**

265 **13.4.1 Small batteries**

266 *Replace the reference of IEC 61032 to EN 61032:1998 in the 5th paragraph.*

267 *Replace the reference of IEC 60335-1 to EN 60335-1:2017 in the 5th paragraph.*

268 *Replace the reference of IEC 60086-2 to EN 60086-2:2016 in the Note.*

269 *Replace the second paragraph with the following:*

270 *"For parts of toys containing batteries, where the part fits wholly within the small parts cylinder as*
271 *specified in 8.2 of EN 71-1:2014+A1:2018, batteries shall not be accessible without the aid of a*
272 *tool."*