



SLOVENSKI STANDARD
SIST FprEN 60335-2-95:2011/oprAA:2013
01-oktober-2013

Gospodinjski in podobni električni aparati - Varnost - 2-95. del: Posebne zahteve za pogonske sklope dvizhnih garažnih vrat za stanovanjsko rabo - Dopolnilo AA

Household and similar electrical appliances - Safety -- Part 2-95: Particular requirements for drives for vertically moving garage doors for residential use

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-95: Besondere Anforderungen für Antriebe von Garagentoren mit Senkrechtbewegung zur Verwendung im Wohnbereich

Appareils électrodomestiques et analogues - Sécurité -- Partie 2-95: Règles particulières pour les motorisations de portes de garage à ouverture verticale pour usage résidentiel

Ta slovenski standard je istoveten z: FprEN 60335-2-95:2010/prAA:2013

ICS:

13.120	Varnost na domu	Domestic safety
91.060.50	Vrata in okna	Doors and windows

SIST FprEN 60335-2-95:2011/oprAA:2013

en,fr,de

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[kSIST FprEN 60335-2-95:2010/kFprAA:2014](https://standards.iteh.ai/catalog/standards/sist/381928fe-9454-4f79-a7ac-0219270fa703/ksist-fpren-60335-2-95-2010-kfpraa-2014)
<https://standards.iteh.ai/catalog/standards/sist/381928fe-9454-4f79-a7ac-0219270fa703/ksist-fpren-60335-2-95-2010-kfpraa-2014>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
FprEN 60335-2-95
prAA

June 2013

ICS 13.120; 29.120.01; 91.090

English version

**Household and similar electrical appliances - Safety -
Part 2-95: Particular requirements for drives for vertically moving garage doors
for residential use**

Appareils électrodomestiques et analogues
- Sécurité -
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motorisations de portes de garage à
ouverture verticale, pour usage résidentiel

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke -
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Antriebe von Garagentoren mit
Senkrechtbewegung zur Verwendung im
Wohnbereich

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This draft amendment prAA, if approved, will modify the European Standard FprEN 60335-2-95:2010; it is submitted to CENELEC members for CENELEC enquiry.
Deadline for CENELEC: 2013-11-22.

It has been drawn up by CLC/TC 61, FprEN 60335-2-95:2010/kFprAA:2014

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.

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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.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

1 Foreword

2 This draft amendment to the draft European Standard FprEN 60335-2-95:2010 was prepared by CLC/TC 61,
3 "Safety of household and similar electrical appliances". It contains common modifications to
4 IEC 60335-2-95:2011, Ed. 3) and is submitted to the Enquiry.

5
6 If approved, this draft amendment will be merged together with FprEN 60335-2-95:2010 and both drafts will be
7 published as one single document, i.e. EN 60335-2-95:201X (based on IEC 60335-2-95:2011, modified), with
8 the implementation dates of this prAA.

9
10 EN 60335-2-95:201X will supersede EN 60335-2-95:2004.

11
12 EN 60335-2-95:201X will include the following significant technical changes with respect to
13 EN 60335-2-94:2004:

- 14 – some notes have been converted to normative text (11.7, 20.2, 20.101);
- 15 – a requirement to fit an entrapment protection device has been added (22.109).

16
17 This document is to be used in conjunction with EN 60335-1:2012 including its amendments.

18
19 This Part 2 supplements or modifies the corresponding clauses of IEC 60335-2-95:2011 and
20 EN 60335-1:2012, so as to convert it into the European Standard. Safety requirements for drives for vertically
21 moving garage doors for residential use.

22 When a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as it is
23 reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is
24 to be adapted accordingly.

25 NOTE 1 The following numbering system is used:

- 26 - subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- 27 - unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in are placed
- 28 clause or subclause;
- 29 - additional annexes are lettered AA, BB, etc.;

30 Clauses, subclauses, notes, tables, figures and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

31 NOTE 2 The following print types are used:

- 32 - requirements: in roman type;
- 33 - *test specifications: in italic type;*
- 34 - notes: in small roman type.

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

37 This document has been prepared under a mandate given to CENELEC by the European Commission and
38 the European Free Trade Association, and supports essential requirements of EU Directive(s).

39
40 For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

41

42 **CLC/TC 61 Secretariat's note:**
43 **National Committees are reminded that this document, when published, will be used together with the**
44 **new EN 60335-1:2012. National committees are requested to consider this when reviewing this draft**
45 **and making comments.**
46 **THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE**
47 **DELETED AT THE PUBLICATION STAGE.**

48 Introduction

49 Add:

50
51 This European Standard has been prepared to provide a means of conforming to essential safety
52 requirements of the Machinery Directive 2006/42/EC. Other requirements and other EU Directives may be
53 applicable to the drives falling within the scope of this standard.

54
55 The relevant requirements of Annex ZE of Part 1 have been incorporated in the text of this part 2.

56
57 Therefore, compliance with the requirements of EN 60335-1 and of this Part 2 gives presumption of conformity
58 of the product with the Essential Health and Safety Requirements (EHSR) of Directive 2006/42/EC as stated
59 in Annex ZZ.

60 Drives put on the market as machines may be installed by the final user. The requirements of this standard
61 also cover the foreseeable misuse of the power operated garage door.

62 Drives put on the market as partly completed machines shall not be installed by the final user. In case of
63 partly completed machines, reference shall be made to the specific procedures of the Machinery Directive
64 2006/42/EC; this standard can, anyhow, be used as guidance.

65 1 Scope

66 *Replacement:*

67 This clause of part 1 is replaced by the following.

68 This European Standard deals with the safety of electric **drives** for garage doors for residential use that open
69 and close in a vertical direction, the **rated voltage** of the **drives** being not more than 250 V for single-phase
70 appliances and 480 V for other appliances. It also covers the hazards associated with the movement of these
71 electrically driven garage doors.

72 NOTE Z101 Examples of garage doors are shown in Figure 101.

73 NOTE Z102 The **drive** may be supplied with a garage door.

74 NOTE Z103 This standard also applies to **entrapment protection devices** for use with **drives**.

75 NOTE Z104 Within the standard the terms **drive** and appliance are interchangeable.

76 This standard deals with the reasonably foreseeable hazards presented by drives that are encountered by all
77 persons in and around the installation place. However, in general, it does not take into account:

- 78 • **children** playing with the appliance;
- 79 • the use of the appliance by **very young children**;
- 80 • the use of the appliance by **young children** without supervision.

81
82 It is recognized that **very vulnerable people** may have needs beyond the level addressed in this standard.

83 NOTE Z105 Attention is drawn to the fact that in many countries additional requirements are specified by the national authorities
84 responsible for the protection of labour and similar authorities.

85 This standard also covers **automatic drives**.

86 NOTE Z106 This standard does not apply to **drives**

- 87 – for rolling shutters, awnings, blinds and similar equipment (EN 60335-2-97);
- 88 – for garage doors for use by more than one household (EN 60335-2-103);
- 89 – for commercial and industrial purposes;
- 90 – intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust,
91 vapour or gas).

92 Products covered by this standard do not create a noise hazard.

FprEN 60335-2-95:2010/prAA:2013 (E)

93 **2 Normative references**94 *Add the following reference:*95 EN 12978, *Industrial, commercial and garage doors and gates - Safety devices for power operated doors and*
96 *gates - Requirements and test methods*97 **3 Terms and definitions**98 3.101 *Modification:*99 *Replace the text of the note by the following:*100 Examples of components are gears, controls, brakes, components for power transmission from the drive to
101 the driven part (e.g. trolleys, rails, levers, etc.) **entrapment protection systems**.

102

103 **3.102** *Modification:*104 **entrapment protection system**

105 system that provides protection against crushing

106 **3.104** *Replacement:*107 **biased-off switch**

108

109 Control device which initiates and maintains the drive movement only as long as the manual control (actuator)
110 is actuated111 Note Z1 to entry: A **biased-off switch** is also called a **hold to run control**.

112

113 *Add the following new definitions:*114 **3.Z101**115 **rated operating time** [https://standards.iteh.ai/catalog/standards/sist/381928fe-9454-4f79-a7ac-](https://standards.iteh.ai/catalog/standards/sist/381928fe-9454-4f79-a7ac-031927963037/sist-fpr-en-60335-2-95-2010-praa-2014)116 duration of continuous operation assigned to the **drive** by the manufacturer117 Note 1 to entry: During continuous operation, the **drive** may reverse its direction.

118

119 **3.Z102**120 **rated number of operating cycles**121 number of uninterrupted operating cycles assigned to the **drive** by the manufacturer

122 Note 1 to entry: An operating cycle consists of an opening and closing movement of the door.

123 **4 General requirement**124 *Replacement:*

125 This clause of Part 1 is applicable except as follows.

126 *Add to the first paragraph:*127 **Drives** shall be constructed in such a way that they ensure transportation, installation, adjusting, maintenance
128 are carried out safely.129 **5 General conditions for the tests**130 **5.3** *Addition:*131 *When a **drive** incorporates a sub-assembly or a part which has already been tested against relevant clause(s)*
132 *of this standard, those tests need not be repeated, if the incorporation of the sub-assembly or part into the*
133 *drive does not change the performance of the sub-assembly or part.*

134 **5.5** *In the addition replace the text by the following:*

135 *When a test has to be carried out with a door with a wicket door, this is kept in the safe position during the*
136 *tests.*

137 *Safe position of a wicket door is the closed position when it travels together with the door or the open position*
138 *when it does not travel with the door.*

139 **5.7** *Addition:*

140 *If **drives** are intended to operate beyond the ambient temperature range of +5 °C to +40 °C, the tests of*
141 *Clause 20 are carried out at the most unfavourable marked temperature.*

142 *Add a new sub-clause:*

143 **5.Z101 Drives** *shall be tested for compliance with this standard for any mode of operation described by the*
144 *manufacturer in the installation instructions. Whenever required by the instructions, components shall be*
145 *added or changed to perform the tests.*

146 **7 Marking and instructions**

147 **7.1 Replacement**

148 **7.1** *Replace the third, fourth and fifth dashed items in part 1 as follows:*

149 - **rated power input** in Watts;

150 - trade mark or identification mark, Business name and full address or code of the manufacturer and, where
151 applicable, his authorized representative;

152 - model or type reference, serial number, if any, and production year;

153 NOTE Z101 *Production year is the year when the production process is completed. The production year can be part of the serial*
154 *number.*

155 *Add a new dashed item:*

156 - designation of the **drive**. The designation enables the identification of the drive as specified in the
157 instructions and may be the generic denomination and function of the product (e.g. the terms used in the title
158 of this standard – drive for garage door - may be used) or a combination of letters and/or numbers.

159 *Add the following text before the compliance clause in part 1:*

160 **Drives** shall be marked with the **rated number of operating cycles**, unless the **drive** is intended for
161 continuous operation.

162 **Drives** intended to operate beyond the ambient temperature range of +5 °C to +40 °C shall be marked with
163 the minimum and maximum ambient temperatures in which they are intended to operate.

164 Devices used in the **entrapment protection system** to be installed separately shall be marked at least with
165 the manufacturer name and type or model identification.

166 **Drives** supplied without a door shall be marked with the **rated load** in N or in Nm.

FprEN 60335-2-95:2010/prAA:2013 (E)

167 7.6 Addition



168 Upper limit of temperature (ISO 7000/0533)



169 Lower limit of temperature (ISO 7000/0534)

170 7.12 Add the following text after the first paragraph in part 1:

171 The instructions shall contain at least the following information:

- 172 - the business name and full address of the manufacturer, if relevant explanation of the code and, where
- 173 applicable, his authorized representative;
- 174 - model or type reference of the drive as marked on the drive itself, except for the serial number;

175 *Add after the warning the following new warning:*

176 WARNING: the drive shall be disconnected from its power source during cleaning, maintenance and
 177 when replacing parts.

178 *Replace the fifth dashed item by:* (standards.iteh.ai)

- 179 - each month check that the drive reverses or the object can be freed when the door contacts a 50 mm high
- 180 object placed on the floor (for drives incorporating an **entrapment protection system** depending on
- 181 contact with the bottom edge of the door). Adjust if necessary and recheck since an incorrect adjustment
- 182 may present a hazard;

183 *Delete the eighth dashed item.*184 *Addition:*

185 The instructions shall state that the A-weighted emission sound pressure level of the drive is equal or less
 186 than 70 dB(A), e.g. by writing $LpA \leq 70$ dB(A).

187 NOTE Z101 The sound emitted by the structure to which the drive will be connected to is not considered.

188 7.12.1 Addition

189 *Replace the second paragraph after the warning by*

190 For **drives** supplied without a door, the installation instructions shall indicate the type, size and mass of the
 191 garage door leaf for which the **drive** is intended to be used and the position(s) where the **drive** can be
 192 installed.

193 *Replace the third dashed item by:*

- 194 - install the actuating member for the manual release at a height less than 1,8 m. If removable, the
- 195 actuating member should be stored in direct vicinity of the door;

196 *Replace the seventh dashed item by the following:*

- 197 - after installation, ensure that the mechanism is properly adjusted and that the drive reverses when the
- 198 door contacts a 50 mm high object placed on the floor (for drives incorporating an entrapment protection
- 199 system depending on contact with the bottom edge of the door);

200 *In the ninth dashed item replace "open" with "put in the safe position".*

201 *Add the following new dashed items:*

- 202 - description of intended operation of the entrapment protection system, when incorporated in or supplied
203 with the drive;
- 204 - if applicable, that the drive is intended to be installed at least 2,5 m above the floor or other access level;
- 205 - if applicable, that the drive is not to be used with doors having openings exceeding 50 mm in diameter or
206 having edges or protruding parts a person could grip or stand on;
- 207 - after installation, ensure that the entrapment protection system operates as intended;
- 208 - a list of all components included in the drive when delivered not assembled.

209 **7.12.Z1 Modification**

210 *Replace the first sentence of the first paragraph by the following:*

211 The specific instructions related to the safe operation of this appliance (as given in 7.12 of this standard) shall
212 be collated together in the front section of the user instructions, or in a separate dedicated document.

213 **7.15 Addition:**

214 When it is not practical for the marking to be visible after the **drive** has been installed, the marking shall also
215 be included in the instructions.

216 **7.102** *In the warning replace “40mm” with “50 mm”.*

217 **7.104** *Replace the 2nd dashed item by the following:*

- 218 – can be used with doors having openings greater than 50 mm in diameter or having edges or protruding
219 parts a person could grip or stand on;

220 *Add the following new sub clause*

221 **7.Z101** If the **drive** is not to be used with doors having openings exceeding 50 mm in diameter or having
222 edges or protruding parts a person could grip or stand on, the packaging shall be marked accordingly.

223 *Compliance is checked by inspection.*

224 **11 Heating**

225 **11.7** *Replace the second paragraph by the following:*

226 *Automatic drives are operated without rest periods for 3 cycles or the rated number of cycles or 4 minutes,*
227 *whichever is longer.*

228 *Delete the first dashed item.*

229 *Replace the second dashed item by the following:*

- 230 - drives are operated without rest periods for the **rated number of operating cycles** but not less than
231 3 cycles

232 **19 Abnormal operation**

233 **19.11.4.8** *Add after the second paragraph:*

234 NOTE Z101 Same point of operating cycle should be understood as the same movement of the operating cycle (i.e. closing or opening)
235 and not as the same point of the travelling of the driven part.