
Gospodinjski in podobni električni aparati - Varnost - 2-103. del: Posebne zahteve za pogonske sklope vrat in oken - Dopolnilo A11

Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-103: Besondere Anforderungen für Antriebe für Tore, Türen und Fenster

Appareils électrodomestiques et analogues - sécurité - Partie 2-103: Exigences particulières pour les motorisations de portails, portes et fenêtres

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Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-103: Exigences particulières pour les motorisations
de portails, portes et fenêtres

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-103: Besondere Anforderungen für
Antriebe für Tore, Türen und Fenster

This amendment A11 modifies the European Standard EN IEC 60335-2-103:2023; it was approved by CENELEC on 2022-09-05. 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.

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 amendment 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.

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European foreword

This document (EN IEC 60335-2-103:2023/A11:2023) has been prepared by CLC/TC 61 “Safety of household and similar electrical appliances”.

The following dates are fixed:

- latest date by which this document has to be (dop) 2023-11-12 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2026-05-12 conflicting with this document have to be withdrawn

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 is read in conjunction with EN IEC 60335-2-103:2023, EN IEC 60335-2-103:2023/A1:2023 and EN IEC 60335-2-103:2023/A2:2023.

The numbering system for European clauses, subclauses, notes, tables, figures and annexes that are additional to those in the IEC standard are prefixed with the letter “Z”.

This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

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1 Modification to the Introduction

Addition:

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

The intended use of the **drives** covered by this document is for them to be installed together with windows and with horizontally and vertically moving gates and doors for pedestrian use as well as for vehicles and the necessary ancillary components (e.g. controls, safety devices) to create a power operated **window**, gate or door.

The safety of horizontally and vertically moving gates and doors is ensured by this document and EN 12453.

The safety of pedestrian doors is ensured by this document and EN 16005.

The safety of **windows** is ensured by this document.

This document covers the hazards generated by the **drive**.

Drives put on the market as machines may be installed by the final user. The requirements of this document cover **drives** and also the foreseeable misuse of the power operated horizontally and vertically moving gates and doors for pedestrian use as well as for vehicles, garage doors and **windows**.

Drives placed on the market as partly completed machines should not be installed by the final user. In case of partly completed machines, reference should be made to the specific procedures of the Machinery Directive; this document can be used as guidance.

This document does not deal with any specific requirements on noise emitted from **drives** for gates, doors and **windows** as the generated noise is not considered to be a relevant hazard.

With European Amendment A11, EN 60335-2-103:2015 is superseded.

This European Amendment A11 supplements or modifies the corresponding clauses of the standards below:

- EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019+A15:2021+FprA16:—¹ (Part 1)
- EN IEC 60335-2-103:2023+A1:2023+A2:2023 (Part 2)

2 Modification to Clause 1, “Scope”

Modification:

Replace the second sentence of the second paragraph starting with “It also covers the hazards associated ...” by the following:

It also covers the hazards generated by the power transmission of the **drive** to the **driven part** of horizontally and vertically moving gates and doors, pedestrian doors and windows for household and similar purposes.

Hazards associated with the movement of the **driven part** of horizontally and vertically moving gates and doors for household and similar purposes, are covered by this document and EN 12453.

Hazards associated with the movement of the **driven part** of pedestrian doors are covered by this document and EN 16005.

Hazards associated with the movement of the **driven part** of windows are covered by this document.

Add the following note after the fourth paragraph starting with “Drives not intended for normal household use...”:

¹ To be published in 2023. Stage at the time of publication: FprEN 60335-1:2012/A16:2021.

NOTE Z101 Household environment includes the dwelling and its associated buildings, the garden, etc.

*Replace in the fifth paragraph starting with “Requirements for **drives**” the text “Annex AA” by “EN 16005”*

*Add the following Note after the fifth paragraph starting with “Requirements for **drives**”:*

NOTE Z102 Attention is drawn to the fact that for **drives** for powered pedestrians doors used in emergency routes and exits additional requirements as given in EN 16005 are applicable.

Replace the sixth paragraph starting with “As far as is practicable...” up to “... children playing with the drive”, excluding notes 103, 104 and 105, by the following:

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

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

It is recognized that **very vulnerable people** can have needs beyond the level addressed in this document.

In NOTE 104, replace in the fifth dash the standard “ISO 21927-2” by “EN 12101-2”.

Add the following dashed items to Note 104:

- for side curtains ventilation systems
- for doors on vehicles;
- lock gates and dock gates;
- doors on lifts;
- armoured doors;
- doors mainly for the retention of animals, unless they are at the site perimeter;
- theatre textile curtains;
- doors outside the reach of people (such as crane gantry fences);
- barriers;
- doors used in industrial processes;
- partition walls;
- turnstiles;
- platform doors.

Add the following note after Note 105:

NOTE Z103 Within the document the terms **drive** and appliance are interchangeable.

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Add the following paragraph:

Products covered by this document and installed according to the manufacturer instructions do not create a noise hazard.

3 Modification to Clause 2, “Normative references”

Add the following references:

EN 12978:2003+A1:2009, *Industrial, commercial and garage doors and gates - Safety devices for power operated doors and gates - Requirements and test methods*

EN 16005:2012², *Power operated pedestrian doorsets - Safety in use - Requirements and test methods*

EN 12453:2017+A1:2021, *Industrial, commercial and garage doors and gates. Safety in use of power operated doors. Requirements and test methods*

Delete the standard IEC 61496-3:2008.

4 Modification to Clause 3, “Terms and definitions”

3.101 Addition:

Note Z101 to entry: Examples of components for power transmission from the **drive** to the **driven part**: trolleys, rails, levers, etc.

3.107 Addition:

For revolving doors a **cycle** means the necessary rotation to allow a person to pass through it.

3.108 Addition:

Note Z101 to entry: Trapping is covered by the manual release of BB.20.102, CC.20.101 or DD.20.102 as applicable.

3.109 Addition:

After the words “... control is actuated”, add the words “by the user.”

3.111 Replacement

Horizontally moving pedestrian door

Swinging, sliding or rotating door intended for pedestrian use.

5 Modification to Clause 4, “General requirement”

Add at the end of the first paragraph of Part 1:

Drives shall also be constructed in such a way that they ensure transportation, installation, adjusting, maintenance may be carried out safely.

² As impacted by EN 16005:2012/AC:2015.

6 Modification to Clause 5, “General conditions for the tests”

5.3 Add at the end of the clause of Part 1:

When a **drive** incorporates a sub-assembly or a part which has already been tested against relevant clause(s) of this document, those tests need not be repeated, if the incorporation of the sub-assembly or part into the **drive** does not change the performance of the sub-assembly or part.

5.5 Replace the addition by:

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

Safe position of a wicket door is the fully closed position when it travels together with the door or the fully open or completely removed position when it does not travel with the door.

7 Modification to Clause 7, “Marking and instructions”

This clause of Part 1 is applicable except as follows.

7.1 Replace the fourth and fifth dashed items in Part 1 as follows:

- Trade mark or identification mark. Business name and postal address or code of the manufacturer and, where applicable, his authorized representative. When, due to the size of the **drive**, this is not possible, trade mark or identification mark are acceptable on the product and business name and full address are included in the instructions;
- Model or type reference, serial number, if any, and production year;

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

Add the following new dashed item after the eight dash in Part 1:

- designation of the **drive**. The designation enables the identification of the drive as specified in the instructions and may be the generic denomination and function of the product (e.g. the terms used in the title of this document – drive for window, drive for gate, etc. – may be used) or a combination of letters and/or numbers.

Replace the addition in Part 2 by the following:

Drives shall be marked with their ambient temperature range.

Drives shall be marked with:

- the **rated load**, in newtons (N) or in newton-metres (Nm), unless the **drive** is supplied with a **driven part**;
- the **rated number of operating cycles** or the **cycles** per hour, unless the **drive** is intended for continuous operation.

7.12 Modification:

Replace the first sentence of the first paragraph in Part 1 by:

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

Add the following text after the first paragraph in Part 1:

The instructions shall contain at least the following information:

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- the business name and full address of the manufacturer, if relevant explanation of code and, where applicable, his authorized representative;
- model or type reference of the drive as marked on the drive itself, except for the serial number;
- the possible reasonably foreseeable misuse and, whenever relevant, a warning against the effects it may have on the safe use of the drive;
- designation of the drive together with its explanation if it is composed by a combination of letters and/or numbers.

Add after the first warning in Part 2:

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

Replace the first dashed item starting with “do not allow children to play...” by:

- do not allow children to play with door/gate controls. Keep remote controls away from children;

After the first dashed item, add the following:

- watch the moving door/gate and keep people away until the door is completely opened or closed (not necessary for automatic drives);

Delete the dashed item starting with “disconnect the supply(s) when cleaning...”.

Add the new paragraph:

The instructions shall state that the A-weighted emission sound pressure level of the drive is equal to or less than 70 dB(A), e.g. by writing $L_{pA} \leq 70 \text{ dB(A)}$.

NOTE Z101 The influence of the sound pressure level from the structure including the driven part, to which the drive will be connected to, is not considered.

7.12.1

After the warning add the following new paragraphs:

For drive intended to be installed by the end-user, the installation instructions shall specify all components needed for compliance with this document.

For drive not intended to be installed by the end-user and when components needed for compliance with this document are not delivered with the drive, the instructions shall either give reference needed to correctly identify these components or give reference to a website, catalogue or similar where details shall be made available.

Replace the paragraph starting with “The installation instructions shall specify the type...” by the following:

The installation instructions shall contain a specification of the type of gate, door, garage door or window the drive is intended for, size and mass of the driven part or mass of the driven part and torque required and locations where the drive can be installed.

Delete the ninth dashed item starting with “details of the maximum allowed distance from the wall ...”

Replace the tenth dashed item starting with “details for the installation of the drive...” by the following:

- details for the installation of the drive, including any separately installed protection devices or deformable edges;