

SLOVENSKI STANDARD SIST EN IEC 60335-2-97:2023

01-julij-2023

Nadomešča:

SIST EN 60335-2-97:2007/A11:2009 SIST EN 60335-2-97:2007/A12:2015 SIST EN 60335-2-97:2007/A2:2010

Gospodinjski in podobni električni aparati - Varnost - 2-97. del: Posebne zahteve za pogonske sklope rolojev, ponjav, senčnikov in podobne opreme (IEC 60335-2-97:2016)

Household and similar electrical appliances - Safety - Part 2-97: Particular requirements for drives for rolling shutters, awnings, blinds and similar equipment (IEC 60335-2-97:2016)

https://standards.iteh.ai/catalog/standards/sist/cb1fccf3-3f9e-40b0-987d-f324d57bf9b7/si

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-97: Besondere Anforderungen für Antriebe für Rollläden, Markisen, Jalousien und ähnliche Einrichtungen (IEC 60335-2-97:2016)

Appareils électrodomestiques et analogues - Sécurité - Partie 2-97: Exigences particulières pour les motorisations de volets, stores, rideaux et équipements analogues (IEC 60335-2-97:2016)

Ta slovenski standard je istoveten z: EN IEC 60335-2-97:2023

ICS:

13.120 Varnost na domu Domestic safety

29.120.01 Električna dodatna oprema Electrical accessories in

na splošno general

91.060.50 Vrata in okna Doors and windows

SIST EN IEC 60335-2-97:2023 en

SIST EN IEC 60335-2-97:2023

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 60335-2-97:2023

https://standards.iteh.ai/catalog/standards/sist/cb1fccf3-3f9e-40b0-987d-f324d57bf9b7/sist-en-jec-60335-2-97-2023

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM EN IEC 60335-2-97

May 2023

ICS 29.120.01; 91.060.50

Supersedes EN 60335-2-97:2006; EN 60335-2-97:2006/A11:2008; EN 60335-2-97:2006/A2:2010; EN 60335-2-97:2006/A12:2015

English Version

Household and similar electrical appliances - Safety - Part 2-97: Particular requirements for drives for shutters, awnings, blinds and similar equipment (IEC 60335-2-97:2016)

Appareils électrodomestiques et analogues - Sécurité - Partie 2-97: Exigences particulières pour les motorisations de volets, stores, rideaux et équipements analogues (IEC 60335-2-97:2016)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-97: Besondere Anforderungen für Antriebe für Rollläden, Markisen, Jalousien und ähnliche Einrichtungen (IEC 60335-2-97:2016)

This European Standard was approved by CENELEC on 2021-11-29. 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, Türkiye 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 60335-2-97:2023 (E)

European foreword

This document (EN IEC 60335-2-97:2023) consists of the text of document IEC 60335-2-97:2016, prepared by IEC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be (dop) 2024-03-01 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2026-03-01 conflicting with this document have to be withdrawn

This document supersedes EN 60335-2-97:2006 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 is read in conjunction with EN IEC 60335-2-97:2023/A1:2023 and EN IEC 60335-2-97:2023/A11:2023.

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.

https://standards.iteh.ai/catalog/standards/sist/cb1fccf3-3f9e-40b0-987d-f324d57bf9b7/sist-

Endorsement notice

The text of the International Standard IEC 60335-2-97:2016 was approved by CENELEC as a European Standard without any modification.



IEC 60335-2-97

Edition 3.0 2016-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Household and similar electrical appliances – Safety – Part 2-97: Particular requirements for drives for shutters, awnings, blinds and similar equipment

Appareils électrodomestiques et analogues – Sécurité – Partie 2-97: Exigences particulières pour les motorisations des volets, stores, rideaux et équipements analogues 0335-2-97-2023

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.120.01; 91.060.50 ISBN 978-2-8322-3310-8

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.

CONTENTS

ORI	EWORD	4	
NTR	ODUCTION	7	
1 \$	Scope	8	
2 1	Normative references	9	
3 -	Terms and definitions	9	
1 (General requirement	9	
5 (General conditions for the tests	10	
3 (Classification	10	
7 I	Marking and instructions	10	
3 I	Protection against access to live parts	.11	
9 9	Starting of motor-operated appliances	12	
10 I	Power input and current	12	
11 I	Heating	12	
12 \	Void	12	
13 I	Leakage current and electric strength at operating temperature	12	
14	Transient overvoltages	12	
15 I	Moisture resistance	12	
16 I	Leakage current and electric strength	13	
17 (Overload protection of transformers and associated circuits	13	
	Endurance		
19 /	Abnormal operationSIST FN IFC 60335-2-97:2023	13	
20	Stability and mechanical hazards and signification of the stability and mechanical hazards and signification of the stability and mechanical hazards and significant of the stability and mechanical hazards and significant of the stability and mechanical hazards are stability and mechanical hazards are stability and mechanical hazards.	13	
21 I	Mechanical strength	16	
22 (Construction	16	
23 I	Internal wiring	16	
24 (Components	16	
25	Supply connection and external flexible cords	16	
26	Terminals for external conductors	17	
27 I	Provision for earthing	17	
28 \$	Screws and connections	17	
29 (Clearances, creepage distances and solid insulation	17	
30 I	Resistance to heat and fire	17	
31 I	Resistance to rusting	17	
32 I	Radiation, toxicity and similar hazards	17	
Anne	xes	20	
Anne	nnex C (normative) Ageing test on motors2		
Anne	nnex R (normative) Software evaluation20		
Biblic	ography	21	

SIST EN IEC 60335-2-97:2023

IEC 60335-2-97:2016 © IEC 2016	- 3 -	
Figure 101 – Examples of types of driven pa	arts	18
Figure 102 – Example of test apparatus with driven parts	hout a driven part for drives for rolling	19

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 60335-2-97:2023
https://standards.iteh.ai/catalog/standards/sist/cb1fccf3-3f9e-40b0-987d-f324d57bf9b7/sist-

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-97: Particular requirements for drives for shutters, awnings, blinds and similar equipment

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.

This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This third edition cancels and replaces the second edition published in 2002 including its Amendment 1 (2004) and its Amendment 2 (2008). It constitutes a technical revision.

The principal changes in this edition as compared with the second edition of IEC 60335-2-97 are as follows (minor changes are not listed):

- Deleted "rolling" from the title and modified the scope to cover appliance types other than shutters, awnings, and blinds that are operated in a rolling way;
- Revised 19.13 to allow drives to obtain a safe position;
- Added 19.101 to provide a new abnormal test for drives with rated operating time;

- 5 -

- Added 20.104.4 to establish a test intended to cover horizontal movement (non-rolling) drive parts;
- Added 20.104.5 to provide an additional test to cover rolling grills to address the risk of being lifted;
- Modified 22.46 and Annex R to introduce software requirements for programmable electronic circuits used to comply with Clause 20;
- Added 22.101 to introduce a requirement to prevent inadvertent adjustments that would lead to unsafe application of drives;
- Added examples of swing shutters and sliding shutters in Figure 101.

The text of this standard is based on the following documents:

FDIS	Report on voting
61/5111/FDIS	61/5141/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fifth edition (2010) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for drives for shutters, awnings, blinds and similar equipment.

https://standards.iteh.ai/catalog/standards/sist/ch1fccf3-3f9e-40b0-987d-f324d57hf9b7/sist-

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

NOTE 2 The following numbering system is used:

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

NOTE 3 The following print types are used:

- requirements: in roman type;
- test specifications: in italic type;
- notes: in small roman type.

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 in bold.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- · reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of the Amendment 2 be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 60335-2-97:2023
https://standards.iteh.ai/catalog/standards/sist/cb1fccf3-3f9e-40b0-987d-f324d57bf9b7/sist

- 6 **-**

-7-

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the **drive** in question over and above the general requirements.

This standard is a product family standard dealing with the safety of drives and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.