

# SLOVENSKI STANDARD oSIST pren IEC 60335-2-10:2024

01-julij-2024

Gospodinjski in podobni električni aparati - Varnost - 2-10. del: Posebne zahteve za stroje za čiščenje tal in za stroje za mokro ščetkanje

Household and similar electrical appliances - Safety - Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-10: Besondere Anforderungen für Bodenbehandlungs- und Nassschrubbmaschinen

Appareils électrodomestiques et analogues - Sécurité - Partie 2-10: Exigences particulières pour les appareils de traitement des sols et les machines à brosser les sols mouillés

Ta slovenski standard je istoveten z: UprEN IEC 60335-2-10:2024

ICS:

13.120 Varnost na domu Domestic safety

97.080 Aparati za čiščenje Cleaning appliances

oSIST prEN IEC 60335-2-10:2024 en

oSIST prEN IEC 60335-2-10:2024

# iTeh Standards (https://standards.iteh.ai) Document Preview

oSIST prEN IEC 60335-2-10:2024

https://standards.iteh.ai/catalog/standards/sist/40a3db80-7bb2-46a9-82e7-e79788f20698/osist-pren-iec-60335-2-10-202

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# **DRAFT**prEN IEC 60335-2-10

June 2024

ICS 13.120; 97.080

Will supersede EN 60335-2-10:2003; EN 60335-2-10:2003/A1:2008

#### **English Version**

Household and similar electrical appliances - Safety - Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines (IEC 60335-2-10:2021)

Appareils électrodomestiques et analogues - Sécurité -Partie 2-10: Exigences particulières pour les appareils de traitement des sols et les machines à brosser les sols mouillés (IEC 60335-2-10:2021) Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-10: Besondere Anforderungen für Bodenbehandlungs- und Nassschrubbmaschinen (IEC 60335-2-10:2021)

This draft European Standard is submitted to CENELEC members for enquiry. Deadline for CENELEC: 2024-08-30.

The text of this draft consists of the text of IEC 60335-2-10:2021 (61/6382/FDIS).

If this draft becomes a European Standard, 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.

This draft European Standard 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, 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.

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

© 2024 CENELEC

All rights of exploitation in any form and by any means reserved worldwide for CENELEC Members.

#### prEN IEC 60335-2-10:2024 (E)

## 1 European foreword

- 2 This document (prEN IEC 60335-2-10:2024) consists of the text of IEC 60335-2-10:2021 prepared by
- 3 IEC/TC 61 "Safety of household and similar electrical appliances".
- 4 This document is currently submitted to the Enquiry.
- 5 The following dates are proposed:
  - latest date by which the existence of this document has to be announced at national level

(doa) dor + 6 months

 latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months

 latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)

- 6 This document is read in conjunction with prEN IEC 60335-2-10:2024/prAA:2024.
- 7 This document will supersede EN 60335-2-10:2003 and all of its amendments and corrigenda (if any).
- 8 This document has been prepared under a standardization request addressed to CENELEC by the European
- 9 Commission. The Standing Committee of the EFTA State subsequently approves these requests for its
- 10 Member States.
- 11 For relationship with EU legislation, see informative Annexes ZZA and ZZC, which are an integral part of
- 12 prEN IEC 60335-2-10:2024/prAA:2024.

13 oSIST prFN IEC 60335-2-10:2024

14tps://standards.iteh.ai/catalog/standards/sist/40a3db80-7bb2-46a9-82e7-e79788f20698/osist-pren-iec-60335-2-10-2024



## IEC 60335-2-10

Edition 6.0 2021-12

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

Household and similar electrical appliances – Safety – Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines

Appareils électrodomestiques et analogues – Sécurité –
Partie 2-10: Exigences particulières pour les appareils de traitement des sols et les machines à brosser les sols mouillés

INTERNATIONAL ELECTROTECHNICAL

COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 13.120; 97.080 ISBN 978-2-8322-4055-7

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

FOF	REWORD	4
INT	RODUCTION	7
1	Scope	8
2	Normative references	9
3	Terms and definitions	9
4	General requirement	9
5	General conditions for the tests	9
6	Classification	10
7	Marking and instructions	10
8	Protection against access to live parts	10
9	Starting of motor-operated appliances	10
10	Power input and current	10
11	Heating	10
12	Charging of metal-ion batteries	11
13	Leakage current and electric strength at operating temperature	11
14	Transient overvoltages	11
15	Moisture resistance	12
16	Leakage current and electric strength	12
17	Overload protection of transformers and associated circuits	12
18	Endurance STANDARDS TENDERS TO STANDARDS TO STANDARD TO STAND	12
19	Abnormal operation	12
20	Stability and mechanical hazards	12
21	Mechanical strength	13
22	Construction	
23	Internal wiring	
24	Components	13
25	Supply connection and external flexible cords	13
26	Terminals for external conductors	13
27	Provision for earthing	14
28	Screws and connections	14
29	Clearances, creepage distances and solid insulation	14
30	Resistance to heat and fire	14
31	Resistance to rusting	14
32	Radiation, toxicity and similar hazards	14
Ann	exes	16
Ann	ex C (normative) Ageing test on motors	16
Bibl	iography	17
Fiaı	ure 101 – Probe for measuring surface temperatures	15
_	·	

IEC 60335-2-10:2021	©	IEC	2021
---------------------	---	-----	------

– 3 –

Table 101 -	- Maximum	temperature	rises for	specified	external	surfaces	under n	ormal	
operating c	onditions								11

## iTeh Standards (https://standards.iteh.ai) Document Preview

oSIST prEN IEC 60335-2-10:2024

https://standards.iteh.ai/catalog/standards/sist/40a3db80-7bb2-46a9-82e7-e79788f20698/osist-prep\_iec\_60335-2-10-202

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

# Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines

#### **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.

IEC 60335-2-10 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

This sixth edition cancels and replaces the fifth edition published in 2002 and Amendment 1:2008. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the text has been aligned with IEC 60335-1:2020;
- b) some notes have been converted to normative text (Clause 1, 19.10, 20.1, 20.2, 22.101);
- c) introductions of limits on the temperature rise of external accessible surfaces (Clause 11);
- d) relocation of cord reel modification from 11.7 to 11.2 to align with Part 1;
- e) modification of the resistance to moisture test (15.2);

IEC 60335-2-10:2021 © IEC 2021

- 5 -

f) clarification of the stability test (20.1).

The text of this International Standard is based on the following documents:

Draft	Report on voting
61/6382/FDIS	61/6432/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at <a href="https://www.iec.ch/members\_experts/refdocs">www.iec.ch/members\_experts/refdocs</a>. The main document types developed by IEC are described in greater detail at <a href="https://www.iec.ch/standardsdev/publications">www.iec.ch/standardsdev/publications</a>.

A list of all parts in the IEC 60335 series, published under the general title *Household and similar electrical appliances – Safety*, can be found on the IEC website.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments unless that edition precludes it; in that case, the latest edition that does not preclude it is used. It was established on the basis of the sixth edition (2020) 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: Particular requirements for floor treatment machines and wet scrubbing machines.

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 document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

IEC 60335-2-10:2021 © IEC 2021

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.

**-6-**

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

# iTeh Standards (https://standards.iteh.ai) Document Preview

oSIST prEN IEC 60335\_2\_10:2024