

## SLOVENSKI STANDARD SIST EN IEC 63327:2021

01-september-2021

### Avtomatski stroji za nego tal za komercialno uporabo - Posebne zahteve

Automatic floor treatment machines for commercial use - Particular requirements

## iTeh STANDARD PREVIEW

# Ta slovenski standard je istoveten z: EN IEC 63327:2021

ICS:	<u>SIST EN IEC 63327:2021</u> https://standards.iteh.ai/catalog/standards/sist/88de9c02-83 0c750fd927a5/sist-en-iec-63327-2021					
97.080	Aparati za čiščenje	Cleaning appliances				

SIST EN IEC 63327:2021

en



# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 63327:2021 https://standards.iteh.ai/catalog/standards/sist/88de9c02-83f2-419b-986d-0c750fd927a5/sist-en-iec-63327-2021

#### SIST EN IEC 63327:2021

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### **EN IEC 63327**

June 2021

ICS 13.120; 97.080

**English Version** 

### Automatic floor treatment machines for commercial use -Particular requirements (IEC 63327:2021)

Machines automatiques de traitement des sols à usage commercial - Exigences particulières (IEC 63327:2021) Automatische Bodenbehandlungsmaschinen für den gewerblichen Gebrauch - Besondere Anforderungen (IEC 63327:2021)

This European Standard was approved by CENELEC on 2021-06-08. 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.

iTeh STANDARD PREVIEW

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, Iteland, Iteland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey 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

© 2021 CENELEC All rights of exploitation in any form and by any means reserved worldwide for CENELEC Members.

### European foreword

The text of document 61J/734/CDV, future edition 1 of IEC 63327, prepared by SC 61J "Electrical motor-operated cleaning appliances for commercial use" of IEC/TC 61 "Safety of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63327:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-03-08 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-06-08 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.

### **Endorsement notice**

The text of the International Standard/IEC 63327:2021 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated: <u>SIST EN IEC 63327:2021</u>

https://standards.iteh.ai/catalog/standards/sist/88de9c02-83f2-419b-986d-

IEC 60068-2-78:2012	NOTE	Harmonized/as EN 60068-2-78:2013 (not modified)
IEC 60204-1:2016	NOTE	Harmonized as EN 60204-1:2018 (modified)
IEC 60335 (series)	NOTE	Harmonized as EN 60335 (series)
IEC 60335-2-2	NOTE	Harmonized as EN 60335-2-2
IEC 60335-2-10:2002	NOTE	Harmonized as EN 60335-2-10:2003 (not modified)
IEC 60335-2-29:2016	NOTE	Harmonized as EN 60335-2-29:— <sup>1</sup> (not modified)
IEC 60335-2-100	NOTE	Harmonized as EN 50636-2-100
IEC 60601-1	NOTE	Harmonized as EN 60601-1
IEC 61508 (series)	NOTE	Harmonized as EN 61508 (series)
IEC 62885-9:2019	NOTE	Harmonized as EN IEC 62885-9:2019 (not modified)
ISO 3691-4	NOTE	Harmonized as EN ISO 3691-4
ISO 3743-1:2010	NOTE	Harmonized as EN ISO 3743-1:2010 (not modified)
ISO 3744:2010	NOTE	Harmonized as EN ISO 3744:2010 (not modified)

<sup>&</sup>lt;sup>1</sup> To be published. Stage at the time of publication: FprEN 60335-2-29:2020.

### EN IEC 63327:2021 (E)

ISO 4871:1996	NOTE	Harmonized as EN ISO 4871:2009 (not modified)
ISO 9614-2:1996	NOTE	Harmonized as EN ISO 9614-2:1996 (not modified)
ISO 11203:1995	NOTE	Harmonized as EN ISO 11203:2009 (not modified)
ISO/TR 11688-1	NOTE	Harmonized as EN ISO 11688-1
ISO 13482:2014	NOTE	Harmonized as EN ISO 13482:2014 (not modified)
ISO 13732-1	NOTE	Harmonized as EN ISO 13732-1
ISO 13856-3:2013	NOTE	Harmonized as EN ISO 13856-3:2013 (not modified)

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN IEC 63327:2021</u> https://standards.iteh.ai/catalog/standards/sist/88de9c02-83f2-419b-986d-0c750fd927a5/sist-en-iec-63327-2021

# Annex ZA (normative)

# Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: <u>www.cenelec.eu</u>.

Publication	Year	Title	<u>EN/HD</u>	<u>Year</u>
IEC 60335-1	2020	Household and similar electrical appliances - Safety - Part 1: General requirements	EN IEC 60335-1	2
IEC 60335-2-69	202 <mark>1</mark>	Household and similar relectrical appliances - Safety - Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use	-	-
IEC 60335-2-72	2021 https://sta	Household and similar electrical appliances - Safety - Part 2-72: Particular requirements for floor treatment machines with or without traction drive, for commercial use	9b-986d-	-
IEC 61032	-	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	-
IEC 61058-1	-	Switches for appliances - Part 1: General requirements	EN IEC 61058-1	-
IEC 61770	2008	Electric appliances connected to the water mains - Avoidance of backsiphonage and failure of hose-sets	EN 61770	2009
-	-		+ AC	2011
-	-		+ A11	2018
IEC 62061	-	Safety of machinery - Functional safety of safety-related control systems	EN IEC 62061	-
ISO 13849-1	-	Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design	EN ISO 13849-1	-

<sup>&</sup>lt;sup>2</sup> To be published. Stage at the time of publication: FprEN IEC 60335-1:2020.

### EN IEC 63327:2021 (E)

Publication	Year	Title	<u>EN/HD</u>	Year
ISO 13857	2019	Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs	EN ISO 13857	2019
ISO 18646-1	2016	Robotics - Performance criteria and related test methods for service robots - Part 1: Locomotion for wheeled robots	-	-

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN IEC 63327:2021</u> https://standards.iteh.ai/catalog/standards/sist/88de9c02-83f2-419b-986d-0c750fd927a5/sist-en-iec-63327-2021



# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 63327:2021 https://standards.iteh.ai/catalog/standards/sist/88de9c02-83f2-419b-986d-0c750fd927a5/sist-en-iec-63327-2021



Edition 1.0 2021-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



### Automatic floor treatment machines for commercial use-W Particular requirements (standards.iteh.ai)

Machines automatiques de traitement des sols à usage commercial – Exigences particulières rds.iteh.ai/catalog/standards/sist/88de9c02-83f2-419b-986d-0c750fd927a5/sist-en-iec-63327-2021

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 13.120; 97.080

ISBN 978-2-8322-9763-6

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.

 Registered trademark of the International Electrotechnical Commission Marque déposée de la Commission Electrotechnique Internationale

### CONTENTS

FOR	EWORD	3
INTF	RODUCTION	5
1	Scope	6
2	Normative references	7
3	Terms and definitions	8
4	General requirements	11
5	General conditions for the tests	11
6	Starting of motor operated appliances	11
7	Stability and mechanical hazards	12
8	Construction	15
Ann	exes	17
	ex FF (normative) Additional requirements for automatic floor treatment machines equipped with a manual mode	18
	ex GG (normative) Requirements for docking stations for automatic floor treatment hines for commercial use	20
Ann	ex HH (normative) Requirements to avoid backsiphonage at docking stations	31
	ex II (informative) Emission of acoustical noise of docking stations	
	ex JJ (informative) Alternative route to fulfil safety critical functions	
Bibli	ography	35
Figu	re 1 – Measurement of confined space speed <u>327:2021</u> https://standards.iteh.ai/catalog/standards/sist/88de9c02-83f2-419b-986d- re 2 – Confined space, stopping zone, and contact zone	16
Figu	re 2 – Confined space, stopping zone, and contact zone.	16
Figu	re 3 – Obstacle positioning during docking process	16
Tabl	e 1 – Minimum required performance levels	13
	e GG.1 – Degree of protection against harmful ingress of water	
Tabl	e JJ.1 – Safety functions	34

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### AUTOMATIC FLOOR TREATMENT MACHINES FOR COMMERCIAL USE – PARTICULAR REQUIREMENTS

#### 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.
- 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 enduser.
- 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-icc-63327-2021
- 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 63327 has been prepared by subcommittee 61J: Electrical motor-operated cleaning appliances for commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

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

CDV	Report on voting
61J/734/CDV	61J/747A/RVC

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.

#### - 4 -

IEC 63327:2021 © IEC 2021

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 www.iec.ch/members\_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The requirements for the construction and testing covered by this document are applied in addition to the particular requirements for floor treatment machines with or without traction drive, for commercial use given in IEC 60335-2-72:2021.

NOTE 1 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.

NOTE 2 The 100 numbering is applied in certain clauses of this standard as these are additions to certain existing clauses of IEC 60335-1, IEC 60335-2-69, and IEC 60335-2-72.

NOTE 3 The 200 numbering in certain clauses of this standard is applied to avoid overlap with the numbering of the corresponding clauses of IEC 60335-1, IEC 60335-2-69, and IEC 60335-2-72.

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 **PREVIEW** 

reconfirmed,

(standards.iteh.ai)

- withdrawn,
- replaced by a revised edition, or <u>SIST EN IEC 63327:2021</u>
- amended. https://standards.iteh.ai/catalog/standards/sist/88de9c02-83f2-419b-986d-0c750fd927a5/sist-en-iec-63327-2021

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

#### 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.

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

NOTE 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.

### standards.iteh.ai)

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.

0c750fd927a5/sist-en-iec-63327-2021