



BSI Standards Publication

## **Automatic floor treatment machines for commercial use — Particular requirements**

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## National foreword

This British Standard is the UK implementation of EN IEC 63327:2021. It is identical to IEC 63327:2021.

The UK participation in its preparation was entrusted to Technical Committee CPL/61/10, Floor treatment machines (industrial).

A list of organizations represented on this committee can be obtained on request to its committee manager.

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### Amendments/corrigenda issued since publication

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EUROPEAN STANDARD

**EN IEC 63327**

NORME EUROPÉENNE

EUROPÄISCHE NORM

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)

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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**

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-06-08

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## 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:

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)

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

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)

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

## FOREWORD

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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.

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://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](http://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.

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## 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.

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.

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

### 1 Scope

This International Standard deals with the safety of powered **automatic floor treatment machines** intended for **commercial use** indoors for the following applications:

- sweeping,
- scrubbing,
- wet or dry pick-up,
- polishing,
- application of wax, sealing products and powder-based detergents,
- shampooing

of floors.

The requirements given by this standard are applied in addition to the requirements for commercial floor treatment machines in IEC 60335-2-72, as far as applicable.

For **automatic floor treatment machines** solely designed for wet or dry pick-up, additional or modified requirements of IEC 60335-2-69 where stated are applicable.

Machines covered by this standard can operate in **automatic** or **manual mode**.

Modified requirements are given in Annex FF of this standard for **automatic floor treatment machines** not equipped with a **manual mode**.

The **automatic floor treatment machines** covered by this standard are designed to avoid hazardous contact with persons in the environment applied. It is recognized that **automatic floor treatment machines** for **commercial use** might require operation within close proximity to large groups of people, such as in shopping malls and schools.

Throughout this standard, the term “machine” is used to refer to an **automatic floor treatment machine**.

The following power systems are covered:

- rechargeable batteries that are recharged by **built-in battery chargers** or off-board battery chargers which may be incorporated within the circuitry of the machine, or mounted on the machine and incorporated within the enclosure of the **automatic floor treatment machine**; or powered by batteries that need to be removed to be recharged with a charger that is external to the machine,
- Other systems are under consideration.

This standard does not apply to

- vacuum cleaners and water-suction cleaning appliances and automatic battery-operated cleaners for household use (IEC 60335-2-2);
- floor treatment machines and wet scrubbing machines for household use (IEC 60335-2-10);
- battery chargers (IEC 60335-2-29);