

**MAJAPIDAMIS- JA MUUD TAOLISED ELEKTRISEADMED.
OHUTUS. OSA 2-80: ERINÕUDED VENTILAATORITELE**

**Household and similar electrical appliances - Safety -
Part 2-80: Particular requirements for fans
(IEC 60335-2-80:2015)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60335-2-80:2024+A11:2024 sisaldab Euroopa standardi EN IEC 60335-2-80:2024 ja selle muudatuse A11:2024 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60335-2-80:2024+A11:2024 consists of the English text of the European standard EN IEC 60335-2-80:2024 and its amendment A11:2024.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.11.2024, muudatus A11 15.11.2024.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 15.11.2024, for A11 15.11.2024.
Muudatusega A1 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega A11 A11 .	The start and finish of text introduced or altered by amendment A11 is indicated in the text by tags A11 A11 .
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English Version

**Household and similar electrical appliances - Safety - Part 2-80:
Particular requirements for fans
(IEC 60335-2-80:2015)**

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-80: Exigences particulières pour les ventilateurs
(IEC 60335-2-80:2015)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-80: Besondere Anforderungen für
Ventilatoren
(IEC 60335-2-80:2015)

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Comité Européen de Normalisation Electrotechnique
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN IEC 60335-2-80:2024) consists of the text of document IEC 60335-2-80:2015, 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 implemented at national level by publication of an identical national standard or by endorsement (dop) 2025-05-15
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2027-11-15

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This document is read in conjunction with EN IEC 60335-2-80:2024/A11:2024.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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The text of the International Standard IEC 60335-2-80:2015 was approved by CENELEC as a European Standard without any modification.

A11 Amendment A11 European foreword

This document (EN IEC 60335-2-80:2024/A11:2024) 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 implemented at national level by publication of an identical national standard or by endorsement (dop) 2025-05-15
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INTERNATIONAL STANDARD



**Household and similar electrical appliances – Safety –
Part 2-80: Particular requirements for fans**



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INTERNATIONAL STANDARD



**Household and similar electrical appliances – Safety –
Part 2-80: Particular requirements for fans**

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ELECTROTECHNICAL
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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references.....	9
3 Terms and definitions	9
4 General requirement.....	10
5 General conditions for the tests.....	10
6 Classification.....	10
7 Marking and instructions	11
8 Protection against access to live parts	12
9 Starting of motor-operated appliances.....	12
10 Power input and current.....	12
11 Heating	12
12 Void	12
13 Leakage current and electric strength at operating temperature	12
14 Transient overvoltages.....	13
15 Moisture resistance	13
16 Leakage current and electric strength.....	13
17 Overload protection of transformers and associated circuits.....	13
18 Endurance.....	13
19 Abnormal operation	13
20 Stability and mechanical hazards	14
21 Mechanical strength.....	14
22 Construction.....	15
23 Internal wiring.....	16
24 Components.....	17
25 Supply connection and external flexible cords	17
26 Terminals for external conductors	17
27 Provision for earthing.....	17
28 Screws and connections	17
29 Clearances, creepage distances and solid insulation	17
30 Resistance to heat and fire	18
31 Resistance to rusting	18
32 Radiation, toxicity and similar hazards	18
Annexes	23
A11 Annex ZE (normative) Specific additional requirements for appliances and machines intended for commercial use A11	24
A11 Annex ZAA (normative) Emission of acoustical noise A11	26
Bibliography	35

Figure 101 – Subclause 22.102.1 – Example	19
Figure 102 – Test pin	20
Figure 103 – Subclause 22.102.2 – Example	21
Figure 104 – $\overline{A11}$ Not Applicable $\overline{A11}$	22
Figure 105 – Subclause 22.102.4 – Example	22
Figure 106 $\overline{A11}$ Not Applicable $\overline{A11}$	22
Figure ZAA.1 — Reference box for a floor standing appliance	27
Figure ZAA.2 — Reference box for a table mounted appliance	28
Figure ZAA.3 — Enveloping measurement surface and positions of the microphones for floor / ceiling or table mounted appliances	29
Figure ZAA.4 — example for the outlet side of wall mounted axial partition fan or other wide range fan type appliances with reference dimensions l_1 , l_2 and l_3 , showing a parallelepiped enveloping measurement surface and typical positions of the microphones	32
Table ZAA.1 — examples of built-in fans / partition fans showing visible accessible inlet and/or outlet openings	31

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-80: Particular requirements for fans

FOREWORD

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

This bilingual version (2018-11) corresponds to the monolingual English version, published in 2015-04.

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 60335-2-80 are as follows (minor changes are not listed):

- added definition for ceiling fan suspension system (3.102);
- added instructions for ceiling fan maintenance (7.12);
- added instructions for ceiling fan installation (7.12.1);

- added entrapment assessment criteria for table and pedestal fan with a fan head that oscillates in the up-down direction (20.102);
- added requirements for insulation of pre-installed internal wiring used to supply attached luminaires (22.101);
- added suspension system failure protection requirements for ceiling fans (22.102);
- added motor brush wear requirements (27.3).

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

FDIS	Report on voting
61/4878/FDIS	61/4914/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.

The French version of this standard has not been voted upon.

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 fans.

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.

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

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site 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 this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

The following differences exist in the countries indicated below.

- 6.2: This requirement is not applicable (USA).
- 7.1: The "T" marking is not required (USA).
- 7.12.1: Other mounting heights are specified and have to be marked on the appliance (USA).
- 19.7: The addition is not applicable (USA).
- 20.2: The requirements are different (USA).
- 21.102: The loads are different (USA).
- 22.102.1: The requirement is not applicable (USA).
- 22.102.2: The requirement is not applicable (USA).
- Figure 101 Example 1: The requirement is not applicable (China, USA).
- Figure 101 Example 2: The requirement is not applicable (China, USA).
- Figure 101 Example 3: This requirement is not applicable (MY).
- Figure 101 Example 4: This requirement is not applicable (MY).
- Figure 101 Example 5: This requirement is not applicable (MY).
- Figure 101 Example 6: This requirement is not applicable (MY).
- 23.3: Different requirements apply (USA).
- 24.101: The requirement is not applicable (USA).

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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.

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 appliance in question over and above the general requirements.

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 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.

A11 With European Amendment A11, EN 60335-2-80:2003+A1:2004+A2:2009 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+A16:2023 (Part 1)
- EN IEC 60335-2-80:2023 (Part 2) **A11**

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-80: Particular requirements for fans

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric fans for household ^(A11) and commercial purposes ^(A11), their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

^(A11) NOTE Z101 Battery-operated appliances and other d.c. supplied appliances are within the scope of this document. Dual supply appliances, either mains-supplied or battery-operated, are regarded as battery-operated appliances when operated in the battery mode. ^(A11)

NOTE 101 Examples of fans that are within the scope of this standard are

- ceiling fans;
- **duct fans**;
- partition fans;
- pedestal fans;
- table fans.

This standard also applies to separate controls supplied with fans.

^(A11) NOTE Z102 Examples of appliances for household environment are appliances for typical housekeeping functions used in the household environment that may also be used by non-expert users for typical household functions:

- in shops, offices and other similar working environments;
- in farm houses;
- by clients in hotels, motels and other residential type environments;
- in bed and breakfast type environments.

NOTE Z103 Household environment includes dwelling and its associated buildings, the garden, etc.

Appliances and machines intended to be used by experts or trained users in shops, in light industry, on construction sites and on farms, and appliances and machines which are declared to be for commercial use by lay persons are within the scope of this document.

Additional requirements for such appliances are given in Annex ZE.

NOTE Z104 The statement from the manufacturer in the product information concerning the specific product is considered to determine the intended use of the appliance. The statement accurately reflects the reasonably foreseeable use of the product.

NOTE Z105 Examples of such appliances and machines are fans for drying purposes or the blower test on construction sites.

NOTE Z106 Criteria applied for the allocation of products covered by standards in the EN 60335 series under either the Low Voltage Directive (LVD) or the machinery Directive (MD) are given for information in Annex ZF of part 1.

NOTE Z107 Appliances built into building ventilation systems of dwellings and its associated buildings are also in the scope of this document. ^(A11)

Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended for use in shops, in light industry and on farms, are within the scope of this standard.

This document deals with the reasonably foreseeable hazards presented by appliances and machines that are encountered by all persons.

A11 However, in general, it does not take into account

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

It is recognized that **very vulnerable people** can have needs beyond the level addressed in this document. **A11**

NOTE 102 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour **A11**, the national water supply authorities **A11** and similar authorities.

NOTE 103 This standard does not apply to

- appliances intended exclusively for industrial purposes;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);
- fans incorporated in other appliances.

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60245-3, *Rubber insulated cables – Rated voltages up to and including 450/750 V – Part 3: Heat resistant silicone insulated cables*

3 Terms and definitions

This clause of Part 1 is applicable except as follows.

3.1.9 Replacement:

normal operation

operation of the appliance under the following conditions

Table and pedestal fans are operated with any oscillating mechanism in operation.

Ceiling fans are fixed to a ceiling.

A11 **Partition fans** **A11** are installed in the centre of a suitable partition having dimensions at least four times the diameter of the air inlet.

Duct fans are installed in a duct in accordance with the installation instructions, the length of the duct being approximately four times the diameter of the fan.