



IEC 60335-2-110

Edition 2.0 2024-07
REDLINE VERSION

INTERNATIONAL STANDARD



**Household and similar electrical appliances – Safety –
Part 2-110: Particular requirements for commercial microwave appliances with
insertion or contacting applicators**



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INTERNATIONAL
ELECTROTECHNICAL
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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	2
1 Scope.....	8
2 Normative references	9
3 Terms and definitions	10
4 General requirement.....	11
5 General conditions for the tests	14
6 Classification.....	14
7 Marking and instructions.....	14
8 Protection against access to live parts.....	18
9 Starting of motor-operated appliances	18
10 Power input and current.....	19
11 Heating.....	19
12 Charging of metal-ion batteries	19
13 Leakage current and electric strength at operating temperature.....	19
14 Transient overvoltages	19
15 Moisture resistance	19
16 Leakage current and electric strength.....	20
17 Overload protection of transformers and associated circuits	20
18 Endurance.....	20
19 Abnormal operation	21
20 Stability and mechanical hazards.....	22
21 Mechanical strength	22
22 Construction	24
23 Internal wiring.....	27
24 Components	27
25 Supply connection and external flexible cords	28
26 Terminals for external conductors.....	28
27 Provision for earthing	29
28 Screws and connections	29
29 Clearances, creepage distances and solid insulation	30
30 Resistance to heat and fire	30
31 Resistance to rusting	30
32 Radiation, toxicity and similar hazards.....	30
101 Protection against accessibility to microwave-containing regions.....	31
Annexes	40
Annex AA (informative) Rationales for the microwave barrier and associated leakage tests	41
Bibliography.....	47
Figure 101 – Test rod for interlock concealment.....	34
Figure 102 – Arrangement for measurement of microwave leakage.....	34

Figure 103 – Construction site, overview of different applicator types and their use35

Figure 104 – Large area contacting applicator without traction drive36

Figure 105 – Large area contacting applicator with traction drive37

Figure 106 – Insertion applicator.....38

Figure 107 – Small area contacting applicator.....39

Table 101 – Assembling torques for screwed connections providing earthing continuity.....30

Table~~101~~ 102 – Specifications for microwave barriers.....33

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-110: Particular requirements for commercial microwave appliances with insertion or contacting applicators

FOREWORD

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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 60335-2-110:2013+AMD1:2019 CSV. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 60335-2-110 has been prepared by subcommittee 61B: Safety of microwave appliances for household and commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

This second edition cancels and replaces the first edition published in 2013 and Amendment 1:2019. This edition constitutes a technical revision.

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

- Subclause 7.1 has been improved in clarity.
- Subclauses 19.11.2 and 19.103 have been improved in clarity.
- Clause 28 has been modified to add screw requirements.

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

Draft	Report on voting
61B/688/CDV	61B/691A/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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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.

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 commercial microwave appliances with insertion or contacting applicators.

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, or
- revised.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations can 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.

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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.

Guidance documents concerning the application of the safety requirements for appliances can be accessed via TC 61 and SC 61B supporting documents on the IEC website
<https://www.iec.ch/tc61/supportingdocuments>
<https://www.iec.ch/sc61b/supportingdocuments>

This information is given for the convenience of users of this International Standard and does not constitute a replacement for the normative text in this standard.

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~~ can 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~~ Horizontal publications, basic safety publications and group safety publications 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 which 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.

NOTE 3 Standards dealing with non-safety aspects of household appliances are:

- IEC standards published by TC 59 concerning methods of measuring performance;
- CISPR 11, CISPR 14-1 and relevant IEC 61000-3 series standards concerning electromagnetic emissions;
- CISPR 14-2 concerning electromagnetic immunity;
- IEC standards published by TC 111 concerning environmental matters.