



NEGARA BRUNEI DARUSSALAM

**BRUNEI DARUSSALAM STANDARD
PIAWAI BRUNEI DARUSSALAM**

**PBD IEC 60335-2-25:2008
IEC 60335-2-25:2008
Edition 5.2**

**HOUSEHOLD & SIMILAR ELECTRICAL APPLIANCES -
SAFETY PART 2-25: PARTICULAR REQUIREMENTS
FOR MICROWAVE OVENS INCLUDING COMBINATION
MICROWAVE OVENS**

**ENERGY DIVISION, PRIME MINISTER'S OFFICE
IN COLLABORATION WITH MINISTRY OF DEVELOPMENT
NEGARA BRUNEI DARUSSALAM**

FOREWORD

This Brunei Darussalam Electrical Standard was prepared by the Technical Committee on Electrical Standards [TECO (Electrical)], Energy Division at Prime Minister's Office in collaboration with the authority of the standards committee, Construction Planning and Research Unit (CPRU), Ministry of Development, Brunei Darussalam with the objective of developing the National Electrical Standards for electrical products, systems, equipment and facilities for the local industries and consumers with reference to international standards, guidelines and procedures. In developing the national electrical standards, the aim is to promote quality, technical integrity, health, safety and environmental standards for the local industries and consumers.

This Brunei Darussalam Electrical Standard is an adoption of the International Electro technical Commission IEC 60335-2-25:2008 (Edition 5.2) standard and implements it as the Brunei Darussalam National Standard.

Attention is drawn to the fact that this Brunei Darussalam Electrical Standard does not confer any immunity from legal obligations in any contract for compliance to the Standard.

The National Electrical Standards are subject to periodical review according to the current needs of the local industries and consumers to keep abreast of progress in the industries and consumers concerned. Suggestions of amendments will be recorded and in due course brought to the notice of the committees concerned.

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**INTERNATIONAL
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60335-2-25

Edition 5.2

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**Household and similar electrical appliances –
Safety –**

**Part 2-25:
Particular requirements for microwave ovens,
including combination microwave ovens**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –Part 2-25: Particular requirements for microwave ovens,
including combination microwave ovens

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.
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- 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.

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

This consolidated version of IEC 60335-2-25 consists of the fifth edition (2002) [documents 61B/212A/FDIS and 61B/219/RVD], its amendment 1 (2005) [documents 61B/298/FDIS and 61B/303/RVD] and its amendment 2 (2006) [documents 61B/316/FDIS and 61B/324/RVD].

The technical content is therefore identical to the base edition and its amendments and has been prepared for user convenience.

It bears the edition number 5.2.

A vertical line in the margin shows where the base ~~publication~~ has been modified by amendments 1 and 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 fourth edition (2001) 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 60335-1, so as to convert that publication into the IEC standard: *Particular requirements for microwave ovens, including combination microwave ovens*.

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 publication will remain unchanged until the maintenance result 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.

The following differences exist in the countries indicated below.

- 5.3: Microwave leakage is not to exceed 10 W/m^2 during the initial test (Japan and USA).
- 6.1: Microwave ovens may be class 0I if the rated voltage does not exceed more than 150 V (Japan).
- 7.12: In the USA, specific instructions exist pertaining to using and servicing microwave ovens with respect to the risk of exposure to microwave energy in accordance with US federal requirements. It is prohibited to place the appliance in a cabinet with a door (Japan).
- Clause 18: The test is carried out on two appliances (USA).
- 19.11.2: The input voltage variation is not applied (USA).
- 19.13: Microwave leakage is measured only at the end of each test (USA).
- 21.102: The applied force is 222 N (USA).
- 21.105: Microwave leakage is not to exceed 50 W/m^2 (Japan and USA).
- 22.111: Microwave leakage is measured only at the end of the test (USA).
- 22.112: Microwave leakage is not to exceed 50 W/m^2 (Japan and USA).
- 22.115: All access to the cavity has to be prevented (USA).

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.

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.

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.

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.

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –****Part 2-25: Particular requirements for microwave ovens,
including combination microwave ovens****1 Scope**

This clause of Part 1 is replaced by the following.

This international standard deals with the safety of **microwave ovens** for household use, their **rated voltage** being not more than 250 V.

This international standard also deals with **combination microwave ovens**, for which Annex AA is applicable.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general it does not take into account

- the use of appliances by young children or infirm persons without supervision;
- playing with the appliance by young children.

NOTE 101 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 and similar authorities.

NOTE 102 This standard does not apply to

- commercial microwave ovens (IEC 60335-2-90)
- Industrial microwave heating equipment (IEC 60519-6)
- appliances for medical purposes (IEC-60601)
- 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).

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60068-2-6, *Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60335-2-6, *Household and similar electrical appliances – Safety – Part 2-6: Particular requirements for cooking ranges, hobs, ovens and similar appliances*

IEC 60335-2-9, *Household and similar electrical appliances – Safety – Part 2-9: Particular requirements for toasters, grills, roasters and similar portable cooking appliances*