



Edition 4.1 2008-07 CONSOLIDATED VERSION

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

Household and similar electrical appliances – Safety – Part 2-26: Particular requirements for clocks

Appareils électrodomestiques et analogues – Sécurité –

Appareils électrodomestiques et analogues – Sécurité – Partie 2-26: Règles particulières pour les horloges

IEC 60335-2-26:2002

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

# HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

# Part 2-26: Particular requirements for clocks

# **FOREWORD**

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 60335-2-26 edition 4.1 contains the fourth edition (2002) [documents 61/2203/FDIS and 61/2284/RVD] and its amendment 1 (2008) [documents 61/3543/FDIS and 61/3597/RVD].

A vertical line in the margin shows where the base publication has been modified by amendment 1.

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

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

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 IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for electric clocks.

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 following differences exist in the countries indicated below.

- 20.1: The requirement only applies to floor-standing clocks, which are tested at an angle of 8° (USA).
- 21.1: The impact tests are different (USA).
- 25.7: Lighter types of power supply cords are allowed (USA).

The committee has decided that the contents of the base publication and its amendments 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.

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 the amendment 1 be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

# 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.

-2002

# HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

# Part 2-26: Particular requirements for clocks

# 1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric clocks having a **rated voltage** not more than 250 V.

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

- alarm clocks;
- spring-driven clocks with an electrically operated winding mechanism;
- clocks incorporating driving means other than motors.

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

- persons (including children) whose
  - physical, sensory or mental capabilities; or
  - lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

children playing with the appliance.

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 and similar authorities.

NOTE 103 This standard does not apply to

- battery-operated clocks;
- 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);
- clocks having other functions, whether or not in combination with time indication, such as master control clocks and timers for cooking ranges, washing machines and similar appliances;
- clocks for "clocking-in" purposes;
- clocks incorporating electronic circuits only (IEC 60065).

# 2 Normative references

This clause of Part 1 is applicable.

### 3 Definitions

This clause of Part 1 is applicable except as follows.

# 3.1.9 Replacement:

#### normal operation

operation of the clock under the following conditions

Spring-driven clocks having an electrically operated winding mechanism are operated as in normal use.

Other clocks are operated with the rotor locked.

# 4 General requirement

This clause of Part 1 is applicable.

### 5 General conditions for the tests

This clause of Part 1 is applicable.

# 6 Classification

This clause of Part 1 is applicable. / Standards.iteh.ai)

# 7 Marking and instructions Preview

This clause of Part 1 is applicable. IEC 60335-2-26:2002

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# 8 Protection against access to live parts

This clause of Part 1 is applicable.

# 9 Starting of motor-operated appliances

This clause of Part 1 is not applicable.

# 10 Power input and current

This clause of Part 1 is applicable.

# 11 Heating

This clause of Part 1 is applicable.

### 12 Void

# 13 Leakage current and electric strength at operating temperature

This clause of Part 1 is applicable.

# 14 Transient overvoltages

This clause of Part 1 is applicable.

### 15 Moisture resistance

This clause of Part 1 is applicable.

# 16 Leakage current and electric strength

This clause of Part 1 is applicable.

# 17 Overload protection of transformers and associated circuits

This clause of Part 1 is applicable. //standards.iteh.ai)

# 18 Endurance

This clause of Part 1 is not applicable.

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This clause of Part 1 is applicable except as follows.

# **19.7** Addition:

Spring-driven clocks, having an electrically operated winding mechanism incorporating capacitors or resistors to reduce the motor voltage, are operated with the rotor locked, capacitors or resistors being short-circuited one at a time.

# 20 Stability and mechanical hazards

This clause of Part 1 is applicable.