

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



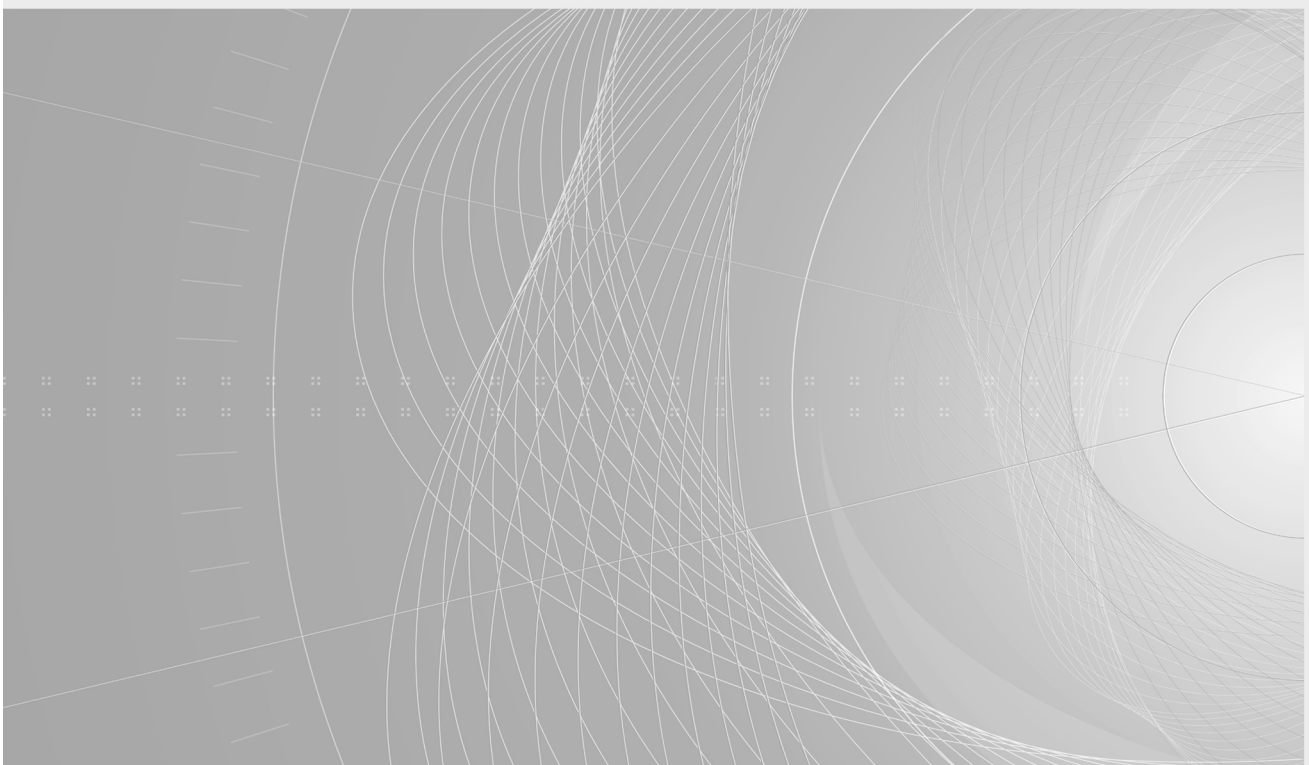
**Sound signalling devices for household and similar purposes**

**Dispositifs de signalisation sonore pour usage domestique et analogue**

Document Preview

[IEC 62080:2001](#)

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CONSOLIDATED VERSION

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**SOUND SIGNALLING DEVICES  
FOR HOUSEHOLD AND SIMILAR PURPOSES****FOREWORD**

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**IEC 62080 edition 1.2 contains the first edition (2001-06) [documents 23/287/FDIS and 23/293/RVD], its amendment 1 (2008-10) [documents 23/450/FDIS and 23/457/RVD] and its amendment 2 (2015-04) [documents 23/705/FDIS and 23/711/RVD].**

**In this Redline version, a vertical line in the margin shows where the technical content is modified by amendments 1 and 2. Additions and deletions are displayed in red, with deletions being struck through. A separate Final version with all changes accepted is available in this publication.**



International Standard IEC 62080 has been prepared by Technical Committee 23: Electrical accessories.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

Annexes A, B and C form an integral part of this standard.

In this standard, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- explanatory matter: in smaller roman type.

Words in **bold** are defined in clause 3.

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## SOUND SIGNALLING DEVICES FOR HOUSEHOLD AND SIMILAR PURPOSES

### 1 Scope

This International Standard applies to **sound signalling devices** with integral enclosures or to **sound signalling devices** intended to be fitted into or supplied with enclosures according to IEC 60670 intended for household and similar purposes with **rated voltages ~~greater than 50 V a.c. or 75 V d.c. and~~** not exceeding 250 V a.c. or 250 V d.c., and with rated power inputs not exceeding 100 VA. **In these sound signalling devices an indicating light having a rated input power not exceeding 10 VA may also be incorporated.**

These products are designated as "devices" throughout the remainder of the text.

This standard applies to **fixed, portable and plug-in devices** for indoor or outdoor use.

In locations where special conditions prevail, special constructions may be required.

NOTE 1 This standard or parts of it may be used as a guide for **sound signalling devices** having a voltage less than 50 V a.c. or 75 V d.c. Additional requirements for **sound signalling devices** having a voltage less than 50 V a.c. or 75 V d.c. are under consideration.

NOTE 2 This standard does not cover the radio transmitting or receiving functions.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60065:1998, *Audio, video and similar electronic apparatus – Safety requirements*

IEC 60068-2-32:1975, *Environmental testing – Part 2: Tests. Test Ed: Free fall (Procedure 1)*

IEC 60068-2-75:1997, *Environmental testing – Part 2-75: Tests. Test Eh: Hammer tests*

IEC 60083:1997, *Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC*

IEC 60085:1984, *Thermal evaluation and classification of electrical insulation*

IEC 60112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*

IEC 60127 (all parts), *Miniature fuses*

IEC 60212:1971, *Standard conditions for use prior to and during the testing of solid electrical insulating materials*

IEC 60216 (all parts), *Guide for the determination of thermal endurance properties of electrical insulating materials*

IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including 450/750 V*

IEC 60317 (all parts), *Specifications for particular types of winding wires*

IEC 60320 (all parts), *Appliance couplers for household and similar general purposes*

IEC 60384-14:1993, *Fixed capacitors for use in electronic equipment – Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains*

IEC 60417 (all parts), *Graphical symbols for use on equipment*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 60664-1:1992, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60664-3, *Insulation coordination for equipment within low-voltage systems – Part 3: Use of coatings to achieve insulation coordination of printed board assemblies*

IEC 60670, *General requirements for enclosures for accessories for household and similar fixed-electrical installations*

IEC 60695-2-1 (all sheets) *Fire hazard testing – Part 2: Test methods – Section 1: Glow-wire test and guidance*

IEC 60730 (all parts), *Automatic electrical controls for household and similar use*

IEC 60998 (all parts), *Connecting devices for low-voltage circuits for household and similar purposes*

IEC 61000-2-2:1990, *Electromagnetic compatibility (EMC) – Part 2: Environment – Section 2: Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems*

IEC 61000-3-2:2000, *Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current  $\leq 16$  A per phase)*

IEC 61000-3-3:1994, *Electromagnetic compatibility (EMC) – Part 3: Limits – Section 3: Limitation of voltage fluctuation and flicker in low-voltage supply systems for equipment with rated current  $\leq 16$  A*

IEC 61000-4-2:1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 2: Electrostatic discharge immunity test. Basic EMC Publication*

IEC 61000-4-3:1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 3: Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-4:1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 4: Electrical fast transient/burst immunity test. Basic EMC Publication*

IEC 61000-4-5:1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 5: Surge immunity test*

IEC 61000-4-6:1996, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 6: Immunity to conducted disturbances, induced by radio-frequency fields*

IEC 61000-4-11:1994, *Electromagnetic compatibility (EMC) – Part 4: Testing and measuring techniques – Section 11: Voltage dips, short interruptions and voltage variations immunity tests*

IEC 61558-1:1997, *Safety of power transformers, power supply units and similar – Part 1: General requirements and tests*

CISPR 14 (all parts), *Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus*

ISO 1456:1988, *Metallic coatings – Electrodeposited coatings of nickel plus chromium and of copper plus nickel plus chromium*

ISO 2081:1986, *Metallic coatings – Electroplated coatings of zinc on iron or steel*

ISO 2093:1986, *Electroplated coatings of tin – Specification and test methods*

### 3 Definitions

For the purpose of this International Standard, the following definitions apply.

NOTE Where the terms “voltage” and “current” are used, they imply r.m.s. values unless otherwise specified.

#### 3.1

##### **sound signalling device**

electromechanical or electronic device which emits an audible sound when activated

NOTE The activation may be produced by manual or automatic means, and where transmission or the activation signal may be through conductors or by radio or any other transmission means.

#### 3.2

##### **type D device**

device where the sound output continues in proportion to the duration of operation of the control

#### 3.3

##### **type R device**

##### 3.3.1

##### **type R1 device**

device where the first sound note is created by the initial operation of the control and a second note is created on the release of the control

##### 3.3.2

##### **type R2 device**

device where the sound output is created by the initial operation of the control and where the period of sound output continues for the designed duration irrespective of the condition of the control

### **3.4 enclosure**

part providing protection of equipment against certain external influences, and in any direction, protection against direct contact

[3.1 of IEC 60529]

### **3.5 fixed device**

device which is intended to be permanently connected to a power supply, and to be used when fastened to a support

NOTE A support may be a permanent part of a building, an appliance, etc.

### **3.6 portable device**

device intended to be connected to, or integral with, flexible cable(s), and which can easily be moved from one place to another while connected to the power supply

### **3.7 plug-in device**

device provided with plug pins and which relies upon insertion into a socket-outlet for its power supply

### **3.8 intermittent operation**

sequence of cycles of operation with a specified ON period and specified OFF period

### **3.9 continuous operation**

operation for an unlimited period

### **3.10 rated voltage**

voltage assigned to the device by the manufacturer

### **3.11 rated voltage range**

range of voltages assigned to the device by the manufacturer, expressed by its upper and lower limits

### **3.12 ELV (extra low voltage)**

voltage supplied from a source within the device which does not exceed 50 V a.c. or 120 V ripple free d.c. between conductors or between conductors or earth when the device is supplied at **rated voltage**

### **3.13 SELV (safety extra-low voltage)**

voltage not exceeding 50 V a.c. or 120 V ripple free d.c. between conductors or between conductors or earth in a circuit which is isolated from the supply by means such as a safety isolating transformer

NOTE 1 Maximum voltages lower than 50 V a.c. or 120 V ripple free d.c. may be specified in particular situations especially when direct contact with live parts is allowed.

NOTE 2 The voltage limit should not be exceeded at any load between full load and no load when the source is a safety isolating transformer.

NOTE 3 "Ripple free" is an r.m.s ripple voltage of not more than 10 % of the d.c. component.

**3.14**

**rated power input**

power input under normal conditions at normal operating temperature assigned to the device by the manufacturer

**3.15**

**rated current**

current assigned to the device by the manufacturer

**3.16**

**rated frequency**

frequency assigned to the device by the manufacturer

**3.17**

**rated frequency range**

range of frequencies assigned to the device by the manufacturer, expressed by its upper and lower limits

**3.18**

**normal use**

use of the device for the purpose for which it was made and/or declared by the manufacturer

**3.19**

**terminal**

conductive part of one pole comprising one or more clamping units and insulation if necessary

[3.5 of IEC 60998-1]

**3.20**

**screw-type terminal**

terminal for the connection of two or more conductors by means of screw-type clamping units

[3.101 of IEC 60998-2-1]

**3.21**

**pillar terminal**

terminal in which the conductors are inserted into a hole or cavity, where they are clamped under the shank of a screw or screws

NOTE The clamping pressure may be applied directly by the shank of the screw or through an intermediate part to which pressure is applied by the shank of the screw.

[3.101.1 of IEC 60998-2-1]

**3.22**

**screw terminal**

terminal in which the conductors are clamped under the head of one or more screws

NOTE The clamping pressure may be applied directly by the head of a screw or through an intermediate part, such as a washer, a clamping plate or an anti-spread device.

[3.101.2 of IEC 60998-2-1]

**3.23**

**thread-forming screw**

tapping screw having an uninterrupted thread, which by screwing in, forms a thread by displacing material

NOTE An example is shown in figure 1a.