
Safety of power transformers, power supply units and similar - Part 2-8: Particular requirements for transformers for switch mode power supplies

Safety of power transformers, power supply units and similar -- Part 2-8: Particular requirements for bell and chime transformers

Sicherheit von Transformatoren, Netzgeräten und dergleichen -- Teil 2-8: Besondere Anforderungen an Klingel- und Läutewerkstransformatoren

Sécurité des transformateurs, blocs d'alimentation et analogues -- Partie 2-8: Règles particulières pour les transformateurs pour sonneries

Ta slovenski standard je istoveten z: EN 61558-2-8:1998

ICS:

29.180 Transformatorji. Dušilke Transformers. Reactors

SIST EN 61558-2-8:2000**en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61558-2-8

November 1998

ICS 29.180

Partly supersedes EN 60742:1995

English version

**Safety of power transformers, power supply units and similar
Part 2-8: Particular requirements for bell and chime transformers
(IEC 61558-2-8:1998)**

Sécurité des transformateurs, blocs
d'alimentation et analogues
Partie 2-8: Règles particulières pour les
transformateurs pour sonneries
(CEI 61558-2-8:1998)

Sicherheit von Transformatoren,
Netzgeräten und dergleichen
Teil 2-8: Besondere Anforderungen an
Klingel- und Läutewerkstransformatoren
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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 96/111/FDIS, future edition 1 of IEC 61558-2-8, prepared by IEC TC 96, Small power transformers, reactors and power supply units and special transformers, reactors and power supply units: safety requirements, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61558-2-8 on 1998-10-01.

This part 2 is to be used in conjunction with EN 61558-1. It was established on the basis of the first edition (1997) of that part 1.

This part 2 supplements or modifies the corresponding clauses of EN 61558-1, so as to convert it into the European Standard "Particular requirements for bell and chime transformers".

Where a particular clause or subclause of part 1 is not mentioned in this part 2, that clause or subclause applies as far as is reasonable. Where this part 2 states "addition", "modification" or "replacement", the relevant text of part 1 is to be adapted accordingly.

This European Standard supersedes section 3 of chapter III of EN 60742.

Subclauses, tables and figures which are additional to those in part 1 are numbered starting from 101.

Annexes which are additional to those in part 1 are lettered AA, BB, etc.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 1999-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2001-07-01

Endorsement notice

The text of the International Standard IEC 61558-2-8:1998 was approved by CENELEC as a European Standard without any modification.



NORME INTERNATIONALE INTERNATIONAL STANDARD

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61558-2-8

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GROUP SAFETY PUBLICATION

**Sécurité des petits transformateurs,
blocs d'alimentation et analogues –**

Partie 2-8:

**Règles particulières pour les transformateurs
pour sonneries**

[SIST EN 61558-2-8:2000](https://standards.iteh.ai/catalog/standards/sist/f9951bb-f0b0-465a-bcb1-1998-08-iec-61558-2-8)

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**Safety of small power transformers,
power supply units and similar –**

Part 2-8:

**Particular requirements for bell
and chime transformers**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF SMALL POWER TRANSFORMERS, POWER SUPPLY UNITS
AND SIMILAR –Part 2-8: Particular requirements for bell and
chime transformers

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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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- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International standard IEC 61558-2-8 has been prepared by technical committee 96: Small power transformers, reactors and **power supply units** and special transformers, reactors and **power supply units**: safety requirements.

It has the status of a group safety publication in accordance with IEC Guide 104: Guide for the drafting of safety standards, and the role of Committees with safety pilot functions and safety group functions (1984).

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

FDIS	Report on voting
96/111/FDIS	96/118/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.

This part 2 is to be used in conjunction with IEC 61558-1. It was established on the basis of the first edition (1997) of that standard.

This part 2 supplements or modifies the corresponding clauses in IEC 61558-1, so as to convert that publication into the IEC standard: *Particular requirements for bell and chime transformers*.

When a particular subclause of part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant text of part 1 is to be adapted accordingly.

This standard replaces section 3 of chapter III of IEC 60742.

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.

In the text of the standard the words in **bold** are defined in clause 3.

Subclauses which are additional to those in part 1 are numbered starting from 101; supplementary annexes are entitled AA, BB, etc.

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SAFETY OF SMALL POWER TRANSFORMERS, POWER SUPPLY UNITS AND SIMILAR –

Part 2-8: Particular requirements for bell and chime transformers

1 Scope

Replacement:

This international standard deals with all aspects of safety such as electrical, thermal and mechanical.

This part 2-8 of IEC 61558 applies to fixed, single-phase, air-cooled (natural or forced), **indépendant** or **associated safety isolating transformers** for bell and chimes, having a **rated supply voltage** not exceeding 250 V a.c., a **rated frequency** not exceeding 500 Hz, a rated output not exceeding 100 VA.

The **no-load output voltage** shall not exceed 33 V a.c. or 46 V ripple free d.c. and the **rated output voltage** shall not exceed 24 V a.c. or 33 V ripple free d.c.

Bell and **chime transformers** are generally intended to supply domestic sound signalling equipment and other similar devices where the load is applied for short periods of time.

NOTE 1 – A partial load may be applied for illumination purposes.

This standard applies to special **safety isolating transformers** (transformer for bell and chime) which are used where **double** or **reinforced insulation** between circuits is required by the installation rules or by the appliance specification.

This standard is applicable to **dry-type transformers**. The windings may be encapsulated or non-encapsulated.

NOTE 2 – Attention is drawn to the fact that for transformers intended to be used in tropical countries special requirements may be necessary.

This standard also applies to transformers incorporating electronic circuits. This standard does not apply to external circuits and their components intended to be connected to the input and output terminals or socket-outlets of the transformer.

2 Normative references

This clause of part 1 is applicable.

3 Definitions

This clause of part 1 is applicable except as follows:

Addition:

3.101 bell and chime transformer: A single-phase **safety isolating transformer** specifically intended to supply domestic sound signalling equipment and other similar devices.

3.102 normal operation: Conditions under which the transformer is operated in normal use (see clause 14).

4 General requirements

This clause of part 1 is applicable.

5 General notes on tests

This clause of part 1 is applicable.

6 Ratings

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This clause of part 1 is applicable except as follows:

Addition:

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6.101 The **rated output voltage** shall not exceed 24 V a.c. or 33 V ripple free d.c.

The preferred values of **rated output voltage** are:

- 8 V, 10 V, 12 V, 16 V, 24 V a.c.;
- 6 V, 12 V, 24 V d.c.

6.102 The **rated output** shall not exceed 100 VA.

The preferred values of **rated output** are:

- 4 VA, 8 VA, 10 VA, 12 VA, 16 VA, 18 VA, 20 VA, 24 VA, 36 VA, 48 VA.

6.103 The **rated frequency** shall not exceed 500 Hz.

6.104 The **rated supply voltage** shall not exceed 250 V a.c.

Compliance with the requirements of 6.101, 6.102, 6.103 and 6.104 is checked by inspection of the marking.