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SIST EN 61558-2-1:2007

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English version

**Safety of power transformers, power supplies,  
reactors and similar products -  
Part 2-1: Particular requirements and tests for separating transformers  
and power supplies incorporating separating transformers  
for general applications  
(IEC 61558-2-1:2007)**

Sécurité des transformateurs,  
alimentations, bobines d'inductance  
et produits analogues -  
Partie 2-1: Règles particulières et essais  
pour transformateurs d'isolement  
à enroulements séparés et alimentations  
incorporant des transformateurs  
d'isolement à enroulements séparés  
pour applications d'ordre général  
(CEI 61558-2-1:2007)

Sicherheit von Transformatoren,  
Netzgeräten, Drosseln und dergleichen -  
Teil 2-1: Besondere Anforderungen  
und Prüfungen an Netztransformatoren  
und Netzgeräten, die Netztransformatoren  
enthalten, für allgemeine Anwendungen  
(IEC 61558-2-1:2007)

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This European Standard was approved by CENELEC on 2007-02-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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 96/252/FDIS, future edition 2 of IEC 61558-2-1, prepared by IEC TC 96, Small power transformers, reactors, power supply units and similar products, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61558-2-1 on 2007-02-01.

This European Standard supersedes EN 61558-2-1:1997.

The main changes consist of updating this Part 2-1 in accordance with EN 61558-1:2005, and adding power supplies to the scope.

This Part 2-1 is intended to be used in conjunction with the latest edition of EN 61558-1 and its amendments. It is based on EN 61558-1:2005.

This Part 2-1 supplements or modifies the corresponding clauses in EN 61558-1, so as to convert that publication into the European standard: *Particular requirements and tests for separating transformers and power supplies incorporating separating transformers for general applications*.

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

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) 2007-11-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2010-02-01

In this Part 2-1, 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 this Part 2-1, the words in **bold** are defined in Clause 3.

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

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61558-2-1:2007 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

*Addition:*

| <u>Publication</u> | <u>Year</u>     | <u>Title</u>   | <u>EN/HD</u> | <u>Year</u>        |
|--------------------|-----------------|--|--------------|--------------------|
| IEC 60076-11       | - <sup>1)</sup> | Power transformers -<br>Part 11: Dry-type transformers | EN 60076-11  | 2004 <sup>2)</sup> |

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

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**61558-2-1**

Deuxième édition  
Second edition  
2007-01

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PUBLICATION GROUPEE DE SÉCURITÉ  
GROUP SAFETY PUBLICATION

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**Sécurité des transformateurs, alimentations,  
bobines d'inductance et produits analogues –**

**Partie 2-1:  
Règles particulières et essais pour transformateurs  
d'isolement à enroulements séparés et alimentations  
incorporant des transformateurs d'isolement  
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**Safety of power transformers, power supplies,  
reactors and similar products –**

**Part 2-1:  
Particular requirements and tests for separating  
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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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For price, see current catalogue*

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SAFETY OF POWER TRANSFORMERS, POWER SUPPLIES,  
REACTORS AND SIMILAR PRODUCTS –****Part 2-1: Particular requirements and tests  
for separating transformers and power supplies  
incorporating separating transformers  
for general applications**

## 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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International standard IEC 61558-2-1 has been prepared by IEC technical committee 96: Small power transformers, reactors, power supply units and similar products.

This second edition cancels and replaces the first edition published in 1997. It constitutes a technical revision. The main changes consist of updating this Part 2-1 in accordance with Part 1 edition 2, and adding power supplies to the scope.

This Part 2-1 has the status of a group safety publication in accordance with IEC Guide 104: The preparation of safety publications and the use of basic safety publications and group safety publications (1997).