SLOVENSKI STANDARD

SIST EN 61558-2-2:2007

01-december-2007

Nadomeģ a:

SIST EN 61558-2-2:1999

Varnost moį nostnih transformatorjev, napajalnikov, reaktorjev in podobnih izdelkov - 2-2. del: Posebne zahteve za kontrolne transformatorje in napajalnike s kontrolnimi transformatorji (IEC 61558-2-2:2007)

Safety of power transformers, power supplies, reactors and similar products - Part 2-2: Particular requirements and tests for control transformers and power supplies incorporating control transformers

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Sicherheit von Transformatoren, Netzgeräten, Drosseln und dergleichen - Teil 2-2: Besondere Anforderungen und Prüfungen an Steuertransformatoren und Netzgeräten, die Steuertransformatoren enthalten

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Sécurité des transformateurs, alimentations, bobines d'inductance et produits analogues - Partie 2-2: Regles particulieres et essais pour les transformateurs de commande et les alimentations incorporant les transformateurs de commande

Ta slovenski standard je istoveten z: **EN 61558-2-2:2007**

ICS:

29.180	Transformatorji. Dušilke	Transformers. Reactors

SIST EN 61558-2-2:2007 **en,fr,de**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61558-2-2

March 2007

ICS 29.180

Supersedes EN 61558-2-2:1998

English version

Safety of power transformers, power supplies, reactors and similar products - Part 2-2: Particular requirements and tests for control transformers and power supplies incorporating control transformers

(IEC 61558-2-2:2007)

Sécurité des transformateurs, alimentations, bobines d'inductance et produits analogues - Partie 2-2: Règles particulières et essais pour les transformateurs de commande et les alimentations incorporant les transformateurs de commande

(CEI 61558-2-2:2007)

Sicherheit von Transformatoren, Netzgeräten, Drosseln und dergleichen - Teil 2-2: Besondere Anforderungen und Prüfungen an Steuertransformatoren und Netzgeräten, die Steuertransformatoren enthalten

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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.

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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

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Foreword

The text of document 96/253/FDIS, future edition 2 of IEC 61558-2-2, 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 61558-2-2 on 2007-02-01.

This European Standard supersedes EN 61558-2-2:1998 + corrigendum February 1998.

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

This Part 2-2 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 2-2 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 control transformers and power supplies incorporating control transformers*.

Where a particular subclause of Part 1 is not mentioned in this Part 2-2, that subclause applies as far as is reasonable. Where this Part 2-2 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

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– requirements proper: in roman type;

– *test specifications: in italic type*;

– explanatory matter: in smaller roman type.

In the text of this Part 2-2, 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.

Endorsement notice

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

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

Addition:

Publication	Year	Title	EN/HD	Year
IEC 60076-11	- [1)]	Power transformers - Part 11: Dry-type transformers	EN 60076-11	2004 [2)]

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[1)] Undated reference.

[2)] Valid edition at date of issue.

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NORME INTERNATIONALE

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CEI
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Deuxième édition
Second edition
2007-01

PUBLICATION GROUPÉE DE SÉCURITÉ
GROUP SAFETY PUBLICATION

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

Partie 2-2: Règles particulières et essais pour les transformateurs de commande et les alimentations incorporant les transformateurs de commande

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Safety of power transformers, power supplies, reactors and similar products –

Part 2-2: Particular requirements and tests for control transformers and power supplies incorporating control transformers

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

FOREWORD 5

1 Scope 9
2 Normative references 11
3 Terms and definitions 11
4 General requirements 13
5 General notes on tests 13
6 Ratings 13
7 Classification 15
8 Marking and other information 15
9 Protection against electric shock 17
10 Change of input voltage setting 17
11 Output voltage and output current under load 17
12 No-load output voltage 19
13 Short-circuit voltage 19
14 Heating 19
15 Short-circuit and overload protection 21
16 Mechanical strength 21
17 Protection against harmful ingress of dust, solid objects and moisture 21
18 Insulation resistance, dielectric strength and leakage current 21
19 Construction 21
20 Components 23
21 Internal wiring 23
22 Supply connection and other external flexible cables or cords 23
23 Terminals for external conductors 25
24 Provisions for protective earthing 25
25 Screws and connections 25
26 Creepage distances, clearances and distances through insulation 25
27 Resistance to heat, fire and tracking 25
28 Resistance to rusting 25

Annexes 27

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 61558-2-2:2007
https://standards.iteh.ai/catalog/standards/sist/be150a12-77e7-4aa7-93e5-010df720f7e6/sist-en-61558-2-2-2007

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF POWER TRANSFORMERS, POWER SUPPLIES, REACTORS AND SIMILAR PRODUCTS –

Part 2-2: Particular requirements and tests for control transformers and power supplies incorporating control transformers

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 2-2 in accordance with Part 1, edition 2, and adding power supplies to the scope.

This Part 2-2 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).

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

FDIS	Report on voting
96/253/FDIS	96/266/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 2-2 is intended to be used in conjunction with the last edition of IEC 61558-1 and its amendments. It is based on the second edition (2005) of that standard.

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

A list of all parts of the IEC 61558 series, under the general title: *Safety of power transformers, power supplies, reactors and similar products*, can be found on the IEC website.

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

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In the text of this Part 2-2 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.

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.

SAFETY OF POWER TRANSFORMERS, POWER SUPPLIES, REACTORS AND SIMILAR PRODUCTS –

Part 2-2: Particular requirements and tests for control transformers and power supplies incorporating control transformers

1 Scope

Replacement:

This part of IEC 61558 deals with safety aspects of **control transformers** and **power supplies** incorporating **control transformers** such as electrical, thermal and mechanical safety.

This Part 2-2 is applicable to **control transformers** and **power supplies** incorporating both **control transformers** and **electronic circuits**. This Part 2-2 is not applicable to external circuits and their components intended to be connected to the input terminals, output terminals or socket-outlets of the **transformer** and **power supplies**.

This Part 2-2 does not apply to **transformers** covered by IEC 60076-11.

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This Part 2-2 applies to **stationary** or **portable**, single-phase or poly-phase, air-cooled (natural or forced), **independent** or **associated control transformers** and **power supplies** incorporating a **control transformer**, having a **rated supply voltage** not exceeding 1 000 V a.c. and **rated supply** and **internal operating frequency** not exceeding 500 Hz.

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The **rated thermal output** does not exceed:

– 25 kVA for single-phase **control transformers** and **power supplies** incorporating **control transformers**;

– 40 kVA for poly-phase **control transformers** and **power supplies** incorporating **control transformers**.

This Part 2-2 is applicable to **control transformers** and **power supplies** incorporating **control transformers** without limitation of the **rated output** subject to an agreement between the purchaser and the manufacturer.

This Part 2-2 is applicable to **dry-type transformers**. The windings may be encapsulated or non-encapsulated.

The **no-load output voltage** or the **rated output voltage** does not exceed 1 000 V a.c. or 1 415 V ripple-free d.c.

For **independent control transformers** and independent **power supplies** incorporating **control transformers**, the **no-load output voltage** and / or the **rated output voltage** is not less than 50 V a.c., or 120 V ripple free d.c.