

Svenska Elektriska Kommissionen, SEK

Fastställt	Utgåva	Sida	Ingår i
2001-08-28	1	1 (1+19)	SEK Område 96

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Transformatorer, strömförsörjningsdon och liknande – Säkerhet – Del 2-15: Särskilda fordringar på isolertransformatorer för matning av medicinska utrymmen

*Safety of power transformers, power supply units and similar –
Part 2-15: Particular requirements for isolating transformers for the supply of medical locations*

Som svensk standard gäller europastandarden EN 61558-2-15:2001. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61558-2-15:2001.

Nationellt förord

Europastandarden EN 61558-2-15:2001

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61558-2-15, First edition, 1999 - Safety of power transformers, power supply units and similar - Part 2-15: Particular requirements for isolating transformers for the supply of medical locations**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden skall användas tillsammans med SS-EN 61558-1, utgåva 1, 1997.

**Safety of power transformers, power supply units and similar
Part 2-15: Particular requirements for isolating transformers for the
supply of medical locations
(IEC 61558-2-15:1999, modified)**

Sécurité des transformateurs, blocs
d'alimentation et analogues
Partie 2-15: Règles particulières pour les
transformateurs de séparation de circuits
pour locaux à usages médicaux
(CEI 61558-2-15:1999, modifiée)

Sicherheit von Transformatoren,
Netzgeräten und dergleichen
Teil 2-15: Besondere Anforderungen an
Trenntransformatoren zur Versorgung
medizinischer Räume
(IEC 61558-2-15:1999, modifiziert)

This European Standard was approved by CENELEC on 2000-08-01. 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, 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 96/119/FDIS, future edition 1 of IEC 61558-2-15, prepared by IEC TC 96, Small power transformers, reactors and power supply units: Safety requirements, was submitted to the IEC/CENELEC parallel vote.

The CENELEC Technical Board asked BTTF 64-1 to assess the comments received and to prepare common modifications, as appropriate. The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 61558-2-15 on 2000-08-01.

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) 2001-12-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-08-01

Annexes designated "normative" are part of the body of the standard.

In this standard, annex ZA is normative.

Annex ZA has been added by CENELEC.

This Part 2-15 of EN 61558 is to be used in conjunction with EN 61558-1:1997.

This Part 2-15 supplements or modifies the corresponding clauses of EN 61558-1, so as to convert it into the European Standard "Particular requirements for isolating transformers for the supply of medical locations".

When a particular clause or subclause of Part 1 is not mentioned in this Part 2-15, that clause or subclause applies as far as is reasonable. Where this Part 2-15 states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

Subclauses, tables and figures which are in addition to those of Part 1 are numbered starting with 101. The reference of subclauses, notes, figures and annexes which have been added by CENELEC is prefixed with the letter Z.

There are no special national conditions (snc) causing a deviation from this European Standard other than those listed in annex ZA of EN 61558-1.

Endorsement notice

The text of the International Standard IEC 61558-2-15:1999 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

1. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60252 (mod)	1993	A.C. motor capacitors	EN 60252 + corr. May	1994 1994
IEC 60364-3 (mod)	1993	Electrical installations of buildings Part 3: Assessment of general characteristics	HD 384.3 S2	1995

SAFETY OF POWER TRANSFORMERS, POWER SUPPLY UNITS AND SIMILAR –

Part 2-15: Particular requirements for isolating transformers for the supply of medical locations

1 Scope

Replacement:

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

This part 2-15 of IEC 61558 applies to stationary, single-phase or polyphase, air-cooled (natural or forced) **isolating transformers** for the supply of group II medical locations, designed to be permanently connected to the fixed wiring of IT supply system, having a **rated supply voltage** not exceeding 1 000 V a.c. and **rated frequency** not exceeding 500 Hz. The **rated output** shall not be less than 3 kVA and shall not exceed 10 kVA.

NOTE 1 – Details of IT supply systems are to be found in IEC 60364-3.

NOTE 2 – The wiring rules for group II medical locations are under consideration [1]*.

The **no-load output voltage** and the **rated output voltage** shall not exceed 250 V a.c. single-phase or polyphase (phase-to-phase voltage).

Isolating transformers 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 winding may be encapsulated or non-encapsulated.

NOTE 3 – For transformers filled with liquid dielectric or pulverised material such as sand, requirements are under consideration.

NOTE 4 – Attention is drawn to the fact that:

- for transformers intended to be used in tropical countries, special requirements may be necessary;
- in locations where special environmental conditions prevail, particular 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.

* The figures in square brackets refer to the bibliography.