



SLOVENSKI STANDARD

SIST EN 61248-1:2002

01-september-2002

Transformers and inductors for use in telecommunication and electronic equipment - Part 1: generic specification (IEC 61248-1:1996)

Transformers and inductors for use in electronic and telecommunication equipment -- Part 1: Generic specification

Transformatoren und Drosseln für elektronische und nachrichtentechnische Einrichtungen -- Teil 1: Fachgrundspezifikation

Transformateurs et inductances destinés aux équipements électroniques et de télécommunications -- Partie 1: Spécification générique

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Ta slovenski standard je istoveten z: EN 61248-1:1997

ICS:

29.180 Transformatorji. Dušilke Transformers. Reactors

SIST EN 61248-1:2002

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61248-1

August 1997

ICS 29.180

Supersedes EN 12600:1992

Descriptors: Transformers and inductors, generic specification, tests, capability approval

English version

**Transformers and inductors for use in electronic and
telecommunication equipment
Part 1: Generic specification
(IEC 61248-1:1996)**

Transformateurs et inductances
destinés aux équipements électroniques
et de télécommunications
Partie 1: Spécification générique
(CEI 61248-1:1996)

Transformatoren und Drosseln für
elektronische und nachrichtentechnische
Einrichtungen
Teil 1: Fachgrundspezifikation
(IEC 61248-1:1996)

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This European Standard was approved by CENELEC on 1997-07-01. 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, 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 the International Standard IEC 61248-1:1996, prepared by IEC TC 51, Magnetic components and ferrite materials, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 61248-1 on 1997-07-01 without any modification.

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) 1998-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-06-01

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

Annexes designated "informative" are given for information only.

In this standard, annex ZA is normative and annexes A and B are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

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The text of the International Standard IEC 61248-1:1996 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

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 Guide 102	1989	Electronic components - Specification structures for quality assessment (Qualification approval and capability approval)	-	-
IEC QC 001001	1986	Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
A2	1994		-	-
IEC QC 001002	1986	Rules of procedure of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
A2	1994		-	-
IEC QC 001004	-	Specifications list	-	-
QC 001005	-	Register of firms, products and services approved under the IECQ System, including ISO 9000	-	-
IEC 60050	series	International Electrotechnical Vocabulary (IEV)	-	-
IEC 60068-1	1988	Environmental testing Part 1: General and guidance		
+ A1	1992		EN 60068-1 ¹⁾	1994
IEC 60068-2-1	1990	Part 2: Tests - Tests A: Cold	EN 60068-2-1	1993
A1	1993		A1	1993
A2	1994		A2	1994
IEC 60068-2-2	1974	Part 2: Tests - Test B: Dry heat	EN 60068-2-2 ²⁾	1993
A1	1993		A1	1993
A2	1994		A2	1994

1) EN 60068-1 includes the corrigendum October 1988 to IEC 60068-1.

2) EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-3	1969	Part 2: Tests - Test Ca: Damp heat, steady state	HD 323.2.3 S2 ³⁾	1987
IEC 60068-2-6	1982	Part 2: Tests - Test Fc and guidance: Vibration (Sinusoidal)	HD 323.2.6 S2 ⁴⁾	1988
IEC 60068-2-7	1983	Part 2: Tests - Test Ga and guidance: Acceleration, steady state		
+ A1	1986		EN 60068-2-7	1993
IEC 60068-2-13	1983	Part 2: Tests - Test M: Low air pressure	HD 323.2.13 S1	1987
IEC 60068-2-14	1984	Part 2: Tests - Test N: Change of temperature	HD 323.2.14 S2	1987
+ A1	1986		HD 323.2.14 S2	1987
IEC 60068-2-17	1994	Part 2: Tests - Test Q: Sealing	EN 60068-2-17	1994
IEC 60068-2-20	1979	Part 2: Tests - Test T: Soldering		
+ A2	1987		HD 323.2.20 S3	1988
IEC 60068-2-21	1983	Part 2: Tests - Test U: Robustness of terminations and integral mounting devices	EN 60068-2-21 ⁵⁾	1997
A2	1991		A2	1997
A3	1992		A3	1997
IEC 60068-2-27	1987	Part 2: Tests - Test Ea and guidance: Shock	EN 60068-2-27	1993
IEC 60068-2-29	1987	Part 2: Tests - Test Eb and guidance: Bump	EN 60068-2-29 ⁶⁾	1993
IEC 60068-2-58	1989	Part 2: Tests - Test Td: Solderability, resistance to dissolution of metallization and to soldering heat of Surface Mounting Devices (SMD)	HD 323.2.58 S1	1991
IEC 60076-1 (mod)	1993	Power transformers Part 1: General	EN 60076-1	1997
IEC 60367-1	1982	Cores for inductors and transformers for telecommunications Part 1: Measuring methods	-	-
A1	1984		-	-
A2	1992		-	-
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-

3) HD 323.2.3 S2 includes A1:1984 to IEC 60068-2-3.

4) HD 323.2.6 S2 is superseded by EN 60068-2-6:1995, which is based on IEC 60068-2-6:1995.

5) EN 60068-2-21 includes the corrigendum November 1991 and A1:1985 to IEC 60068-2-21.

6) EN 60068-2-29 includes a corrigendum to IEC 60068-2-29.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60617	series	Graphical symbols for diagrams	EN 60617	series
IEC 60651 A1	1979 1993	Sound level meters	EN 60651 A1	1994 1994
IEC 60695	series	Fire hazard testing	EN 60695	series
IEC 60723	series	Inductor and transformer cores for telecommunications	-	-
IEC 60852-5	1994	Outline dimensions of transformers and inductors for use in telecommunication and electronic equipment Part 5: Transformers and inductors using the series Q of C-cores	-	-
IEC 61007 (mod)	1994	Transformers and inductors for use in electronic and telecommunication equipment - Measuring methods and test procedures	EN 61007	1997
ISO 31	series	Quantities and units	-	-

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC
1248-1**
QC 260000

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1996-06

**Transformateurs et inductances destinés
aux équipements électroniques et de
télécommunications –**

Partie 1:

**Spécification générique
(standards.iteh.ai)**

**Transformers and inductors for use in electronic
and telecommunication equipment –**

Part 1:

Generic specification

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For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

TRANSFORMERS AND INDUCTORS FOR USE IN ELECTRONIC AND TELECOMMUNICATION EQUIPMENT

Part 1: Generic specification

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 cooperation 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.
- 2) The formal decisions or agreements of the IEC on technical matters, express as nearly as possible an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 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. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 1248-1 has been prepared by IEC technical committee 51: Magnetic components and ferrite materials.

This standard is intended for use in the IEC Quality Assessment System for Electronic Components (IECQ).

The operation of the IECQ is governed by IEC QC 001001 and IEC QC 001002. Specifications written for components assessed under this scheme, and their use in the scheme, are the subject of IEC Guide 102.

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

FDIS	Report on voting
51/398/FDIS	51/427/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.

Annexes A and B are for information only.

The QC number that appears on the front cover of this publication is the specification number in the IECQ System.

TRANSFORMERS AND INDUCTORS FOR USE IN ELECTRONIC AND TELECOMMUNICATION EQUIPMENT

Part 1: Generic specification

1 General

1.1 Scope

This part of IEC 1248 is a generic specification which prescribes the compliance requirements for manufacturers of transformers and inductors for use in electronic equipment in order to obtain capability approval in accordance with 11.7 of QC 001002, and the component test schedules to be used for the assessment of that capability. It applies to components, including polyphase types, that are primarily intended for use in electronic and telecommunication equipment.

This specification also prescribes requirements for marking, delayed delivery and ordering, and lists standard ratings and characteristics. In addition, it specifies how quality conformance testing should be carried out on ordered components.

NOTE – The transformers and inductors that are the subject of this specification may include other components essential to the operation of the device, e.g. capacitors associated with constant voltage transformers and resonated windings.

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1.2 Normative references

The following normative documents contain provisions, which, through reference in this text, constitute provisions of this part of IEC 1248. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 1248 are encouraged to investigate the possibility of applying the most recent editions of the normative documents listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC Guide 102: 1989, *Electronic components. Specification structures for quality assessment (Qualification approval and capability approval)*

IEC QC 001001: 1986, *Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)*
Amendment 2 (1994)

IEC QC 001002: 1986, *Rules of procedure of the IEC Quality Assessment System for Electronic Components (IECQ)*
Amendment 2 (1994)

IEC QC 001004: *Specifications list*

IEC QC 001005: *Register of firms, products and services approved under the IECQ System, including ISO 9000*

IEC 50: *International Electrotechnical Vocabulary (IEV)*