SLOVENSKI STANDARD

SIST EN 61204-6:2003

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Low-voltage power supplies, DC output - Part 6: Requirements for low-voltage power supplies of assessed performance (IEC 61204-6:2000)

ICS 29.200

Referenčna številka
SIST EN 61204-6:2003(en)

EUROPEAN STANDARD

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EN 61204-6

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English version

Low-voltage power supplies, DC output Part 6: Requirements for low-voltage power supplies of assessed performance (IEC 61204-6:2000)

Alimentations basse tension, sortie continue
Partie 6: Exigences relatives aux alimentations basse tension répondant à des performances établies
(CEI 61204-6:2000)

Stromversorgungsgeräte für Niederspannung mit Gleichstromausgang
Teil 6: Anforderungen an Stromversorgungsgeräte für Niederspannung geprüfter Qualität
(IEC 61204-6:2000)

This European Standard was approved by CENELEC on 2000-12-01. 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 22E/76/FDIS, future edition 1 of IEC 61204-6, prepared by SC 22E, Stabilized power supplies, of IEC TC 22, Power electronics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61204-6 on 2000-12-01.

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)	2001-09-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2003-12-01

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.

Endorsement notice

The text of the International Standard IEC 61204-6:2000 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
IEC 60068-2-14	1984	Environmental testing Part 2: Tests - Test N: Change of temperature	EN 60068-2-14	1999
IEC 60068-2-20	1979	Part 2: Tests - Test T: Soldering	HD 323.2.20 S3	1988
IEC 60068-2-21	1999	Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN 60068-2-21	1999
IEC 60068-2-45	1980	Part 2: Tests - Test Xa and guidance: Immersion in cleaning solvents	EN 60068-2-45	1992
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 60721-3-3	1994	Classification of environmental conditions Part 3: Classification of groups of environmental parameters and their severities -- Section 3: Stationary use at weather protected locations	EN 60721-3-3	1995
IEC 61204 (mod)	1993	Low-voltage power supply devices, d.c. output - Performance characteristics and safety requirements	EN 61204	1995
ISO 9000	Series	Quality management and quality assurance standards	EN ISO 9000	Series

NORME INTERNATIONALE

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Alimentations basse tension, sortie continue –

Partie 6:
Exigences relatives aux alimentations basse tension répondant à des performances établies

Low-voltage power supplies, d.c. output –

Part 6:
Requirements for low-voltage power supplies of assessed performance

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LOW-VOLTAGE POWER SUPPLIES, DC OUTPUT –

Part 6: Requirements for low-voltage power supplies of assessed performance

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.
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 specifications, 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. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61204-6 has been prepared by subcommittee 22E: Stabilized power supplies, of IEC technical committee 22: Power electronics.

IEC 61204-6 has the status of a product standard.

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

FDIS	Report on voting
22E/76/FDIS	22E/79/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 3.

IEC 61204 consists of the following parts, under the general title *Low-voltage power supplies, d.c. output:*

Part 1: Terms and definitions[1)]

Part 2: Performance characteristics[1)]

Part 3: Electromagnetic compatibility (EMC)

Part 4: Tests other than EMC[1)]

Part 5: Measurement of the magnetic component of the reactive near field[1)]

Part 6: Requirements for low-voltage power supplies of assessed performance

Part 7: Safety requirements[1)]

The committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition; or
- amended.

1) Under consideration.

LOW-VOLTAGE POWER SUPPLIES, DC OUTPUT –

Part 6: Requirements for low-voltage power supplies of assessed performance

1 Scope and object

This part of IEC 61204 applies to power supplies for general purpose applications. These power supplies carry out an a.c. to d.c. conversion or a d.c. to d.c. conversion. Appropriate provisions for safety will be found in the relevant product standards.

As far as input characteristics are concerned, this standard applies to all d.c. or a.c. source voltages with a rated value of up to 600 V.

As far as output characteristics are concerned, this standard applies only to the supplies of d.c. voltages of less than 200 V with a power limited to 2,5 kW; the latter power can be extended to 30 kW by taking care of the appropriate test methods.

The object of this part of IEC 61204 is to set down the requirements for the performance of low-voltage power supply devices of assessed functionality intended for serial production. If other performance requirements or quality assurance have been agreed by a contract, the latter prevails.

This part of IEC 61204 is intended as a guidance for the improvement of the performance of large series.

For performance and quality conformance inspection, the numbering of the clauses and subclauses of this part of IEC 61204 refer, unless stated otherwise, to IEC 61204.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61204. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61204 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60068-2-14:1984, *Environmental testing – Part 2: Tests – Test N: Change of temperature*

IEC 60068-2-20:1979, *Environmental testing – Part 2: Tests – Test T: Soldering*

IEC 60068-2-21:1999, *Environmental testing – Part 2-21: Tests – Test U: Robustness of terminations and integral mounting devices*

IEC 60068-2-45:1980, *Environmental testing – Part 2: Tests – Test XA and guidance: Immersion in cleaning solvents*