SLOVENSKI STANDARD

SIST EN 60974-6:2003

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Arc welding equipment - Part 6: Limited duty manual metal arc welding power sources

ICS 25.160.30

Referenčna številka
SIST EN 60974-6:2003(en)

EUROPEAN STANDARD **EN 60974-6**

NORME EUROPÉENNE

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ICS 25.160.30

English version

Arc welding equipment
Part 6: Limited duty manual metal arc welding power sources
(IEC 60974-6:2003)

Matériel de soudage à l'arc
Partie 6: Sources de courant de soudage manuel à l'arc metallique à service limité
(CEI 60974-6:2003)

Lichtbogenschweißeinrichtungen
Teil 6: Schweißstromquellen mit begrenzter Einschaltdauer
(IEC 60974-6:2003)

This European Standard was approved by CENELEC on 2003-03-01. 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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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

Ref. No. EN 60974-6:2003 E

Foreword

The text of document 26/247/FDIS, future edition 1 of IEC 60974-6, prepared by IEC TC 26, Electric welding, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60974-6 on 2003-03-01.

This Part 6 of EN 60974 is to be used in conjunction with EN 60974-1:1998.

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)	2003-12-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2006-03-01

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 annex A is informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60974-6:2003 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 60050-151	2001	International Electrotechnical Vocabulary (IEV) Part 151: Electrical and magnetic devices	-	-
IEC 60050-851	1991	Chapter 851: Electric welding	-	-
IEC 60204-1	1997	Safety of machinery - Electrical equipment of machines Part 1: General requirements	EN 60204-1 + corr. September	1997 1998
IEC 60245-6	- [1)]	Rubber insulated cables - Rated voltages up to and including 450/750 V Part 6: Arc welding electrode cables	-	-
IEC 60664-1	1992	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	EN 60664-1 [2)]	2003
IEC 60974-1	1998	Arc welding equipment Part 1: Welding power sources	EN 60974-1	1998
IEC 61032	1997	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998
ISO 857-1	- [1)]	Welding and allied processes - Vocabulary Part 1: Metal welding processes	-	-
ISO 2560	- [1)]	Covered electrodes for manual metal arc welding of mild steel and low alloy steel – Code of symbols for identification	-	-

[1)] Undated reference

[2)] EN 60664-1 includes A1:2000 + A2:2002 to IEC 60664-1.

NORME INTERNATIONALE

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60974-6

Première édition
First edition
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Matériel de soudage à l'arc –

Partie 6:
Sources de courant de soudage manuel à l'arc métallique à service limité

Arc welding equipment –

Part 6:
Limited duty manual metal arc welding power sources

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 6: Limited duty manual metal arc welding power sources

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 60974-6 has been prepared by IEC technical committee 26: Electric welding.

This part of IEC 60974 is to be used in conjunction with IEC 60974-1.

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

FDIS	Report on voting
26/247/FDIS	26/250/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.

The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

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

ARC WELDING EQUIPMENT –

Part 6: Limited duty manual metal arc welding power sources

1 Scope

This part of IEC 60974 is applicable to power sources with a thermal cut-out device for manual metal arc welding with limited duty.

These welding power sources are mainly used by laymen.

This part of IEC 60974 specifies safety requirements for construction and performance requirements of welding power sources, limited to a rated maximum welding current of 160 A.

This part of IEC 60974 is not applicable to:

- rotating welding power sources;
- welding power sources with remote control;
- welding power sources incorporating frequency conversion.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-151:2001, *International Electrotechnical Vocabulary (IEV) – Part 151: Electrical and magnetic devices*

IEC 60050-851:1991, *International Electrotechnical Vocabulary (IEV) – Chapter 851: Electric welding*

IEC 60204-1:1997, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements*

IEC 60245-6, *Rubber insulated cables – rated voltages up to and including 450/750 V – Part 6: Arc welding electrode cables*

IEC 60664-1:1992, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60974-1:1998, *Arc welding equipment – Part 1: Welding power sources*

IEC 61032:1997, *Protection of persons and equipment by enclosures – Probes for verification*