SVENSK STANDARD SS-EN 60974-6

Fastställd	Utgåva	Sida	Ansvarig kommitté
2011-05-04	2	1 (1+37)	SEK TK 26

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Bågsvetsutrustning – Del 6: Strömkällor med begränsad belastningsförmåga

Arc welding equipment – Part 6: Limited duty equipment

Som svensk standard gäller europastandarden EN 60974-6:2011. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60974-6:2011.

Nationellt förord

Europastandarden EN 60974-6:2011

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60974-6, Second edition, 2010 - Arc welding equipment - Part 6: Limited duty equipment**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60974-6, utgåva 1, 2003, gäller ej fr o m 2014-01-01.

ICS 25.160.30

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

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SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60974-6

January 2011

ICS 25.160.30

Supersedes EN 60974-6:2003 + corr. May.2005

English version

Arc welding equipment - Part 6: Limited duty equipment

(IEC 60974-6:2010)

Matériel de soudage à l'arc - Partie 6: Matériel à service limité (CEI 60974-6:2010)

Lichtbogenschweißeinrichtungen - Teil 6: Schweißstromquellen mit begrenzter Einschaltdauer (IEC 60974-6:2010)

This European Standard was approved by CENELEC on 2011-01-01. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Ref. No. EN 60974-6:2011 E

SEK Svensk Elstandard

Foreword

The text of document 26/429/FDIS, future edition 2 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 2011-01-01.

This European Standard supersedes EN 60974-6:2003 + corr. May.2005.

The main significant technical changes with respect to EN 60974-6:2003 + corr. May.2005 are the following:

– extension of the scope;

– amendment of the title;

– touch current at fault condition (see 6.3.7);

– new definition of thermal requirements based two independent devices, one for thermal protection and one for thermal control (see 7.1);

– new definition for thermal performances at 20 °C (see 7.2);

– thermal safety requirements are based on operating temperature for normal condition and maximum temperature in overload condition (see 7.4);

– addition of abnormal operation test for thermal control device (see 10.4);

– new requirement for auxiliaries (see Clause 16);

– new rating plate definition (see Clause 17);

– introduction of new mandatory warning symbols (see 12.1.117.3, Box 17b) and 19.2);

– induced changes due to publication of EN 60974-1:2005.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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)	2011-10-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-01-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60974-6:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60127-1	NOTE	Harmonized as EN 60127-1.
IEC 60269-1	NOTE	Harmonized as EN 60269-1.
IEC 61558-1:2009	NOTE	Harmonized as EN 61558-1:2009 (not modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

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 60529	-	Degrees of protection provided by enclosures (IP Code)	EN 60529	-
IEC 60974-1	2005	Arc welding equipment - Part 1: Welding power sources	EN 60974-1	2005
IEC 60974-5	-	Arc welding equipment - Part 5: Wire feeders	EN 60974-5	-
IEC 60974-7	-	Arc welding equipment - Part 7:Torches	EN 60974-7	-
IEC 60974-10	-	Arc welding equipment - Part 10: Electromagnetic compatibility (EMC) requirements	EN 60974-10	-
IEC 60974-11	-	Arc welding equipment - Part 11: Electrode holders	EN 60974-11	-
IEC 61032	1997	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998
ISO 2503	-	Gas welding equipment - Pressure regulators and pressure regulators with flow-metering devices for gas cylinders used in welding, cutting and allied processes up to 300 bar (30 MPa)	-	-

CONTENTS

ARC WELDING EQUIPMENT –

Part 6: Limited duty equipment

1 Scope

This part of IEC 60974 specifies safety and performance requirements applicable to limited duty arc welding and cutting power sources, and auxiliaries designed for use by laymen. Electrically powered equipment is intended to be connected to the single phase public low-voltage supply system. Engine driven power sources can not exceed output power of 7,5 kVA.

NOTE 1 This equipment is typically used by non-professionals in residential areas.

This part of IEC 60974 is not applicable to arc welding and cutting power sources that require for operation:

- arc striking and stabilizing devices;
- liquid cooling systems;
- gas consoles;
- three-phase input supply;

and which are intended for industrial and professional use only.

This part of IEC 60974 is not applicable to arc welding and cutting power sources and ancillary equipment used in:

- mechanically guided applications;
- submerged arc welding process;
- plasma gouging process;
- plasma welding process;

that are covered by other parts of IEC 60974.

NOTE 2 Power sources, wire feeders, torches and electrode holders designed for industrial and professional use are respectively covered by IEC 60974-1, IEC 60974-5, IEC 60974-7 and IEC 60974-11.

NOTE 3 This part of IEC 60974 does not specify electromagnetic compatibility (EMC) requirements that are given in IEC 60974-10.

2 Normative references

The following normative 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 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60974-1:2005, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-5, *Arc welding equipment – Part 5: Wire feeders*

IEC 60974-7, *Arc welding equipment – Part 7: Torches*

IEC 60974-10, *Arc welding equipment – Part 10: Electromagnetic compatibility (EMC) requirements*

IEC 60974-11, *Arc welding equipment – Part 11: Electrode holders*

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

ISO 2503, *Gas welding equipment – Pressure regulators and pressure regulators with flow-metering devices for gas cylinders used in welding, cutting and allied processes up to 300 bar (30 MPa)*