

SLOVENSKI STANDARD SIST EN 60974-3:2008 01-april-2008

BUXca Yý U. SIST EN 60974-3:2004

CdfYa UnUcVc bc'j Uf'Yb'Y'!" "XY. BUdfUj YnUj ÿ][']b'ghUV]`bcghcVc_Uft97 *\$-+(!'.&\$\$+L

Arc welding equipment - Part 3: Arc striking and stabilizing devices

Lichtbogenschweißeinrichtungen - Teil 3: Lichtbogenzünd- und - stabilisierungseinrichtungen STANDARD PREVIEW

Matériel de soudage à l'arc - Partie 3. Dispositifs d'amorçage et de stabilisation de l'arc

SIST EN 60974-3:2008

Ta slovenski standard/jeristoveten z log/stan ENs 60974-3 ! 2007-48a4-b943-a62dd69 | 5818/sist-en-60974-3 - 2008

ICS:

25.160.30

SIST EN 60974-3:2008

en,fr,de

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60974-3:2008</u> https://standards.iteh.ai/catalog/standards/sist/952c9a1e-1f3c-48a4-b943-a62dd69f5818/sist-en-60974-3-2008

EUROPEAN STANDARD

EN 60974-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2007

ICS 25.160

Supersedes EN 60974-3:2003

English version

Arc welding equipment Part 3: Arc striking and stabilizing devices (IEC 60974-3:2007)

Matériel de soudage à l'arc -Partie 3: Dispositifs d'amorçage et de stabilisation de l'arc (CEI 60974-3:2007) Lichtbogenschweißeinrichtungen -Teil 3: Lichtbogenzünd- und -stabilisierungseinrichtungen (IEC 60974-3:2007)

iTeh STANDARD PREVIEW

This European Standard was approved by CENELEC on 2007-12-01. 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. https://standards.itch.ai/catalog/standards/sist/952c9a1e-1f3c-48a4-b943-

This European Standard exists the existing three officials 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, 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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 26/363/FDIS, future edition 2 of IEC 60974-3, prepared by IEC TC 26, Electric welding, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60974-3 on 2007-12-01.

This European Standard supersedes EN 60974-3:2003.

EN 60974-3:2007 includes the following significant technical changes with respect to EN 60974-3:2003:

- changes induced by the publication of EN 60974-1:2005;
- routine test for built-in unit (see 5.5.2);
- clarification of calculation of the rated peak voltage (see 11.1 and Figure 1).

This standard is to be used in conjunction with EN 60974-1:2005.

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) 2008-09-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2010-12-01

Annex ZA has been added by CENELEC dards.iteh.ai)

SIST EN 60974-32008 https://standards.iteh.ai/Endorsement_noticehttps://standards.iteh.ai/Endorsement_noticehttps://standards.iteh.ai/Endorsement_notice-

The text of the International Standard IEC 60974-3:2007 was approved by CENELEC as a European Standard without any modification.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60974-1	2005	Arc welding equipment - Part 1: Welding power sources	EN 60974-1	2005
IEC 60974-7	2005	Arc welding equipment - Part 7:Torches	EN 60974-7	2005

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60974-3:2008 https://standards.iteh.ai/catalog/standards/sist/952c9a1e-1f3c-48a4-b943-a62dd69f5818/sist-en-60974-3-2008

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60974-3:2008</u> https://standards.iteh.ai/catalog/standards/sist/952c9a1e-1f3c-48a4-b943-a62dd69f5818/sist-en-60974-3-2008



Edition 2.0 2007-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Arc welding equipment-STANDARD PREVIEW Part 3: Arc striking and stabilizing devices iteh.ai)

Matériel de soudage à l'arc - SISTEN 60974-3:2008

Partie 3: Dispositifs d'amorçage et de stabilisation de l'arc 6943-

a62dd69f5818/sist-en-60974-3-2008

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX

R

ISBN 2-8318-9389-5

CONTENTS

FO	REWORD	4			
1	Scope	6			
2	Normative references				
3	Terms and definitions				
4	Environmental conditions	7			
5 Tests					
	5.1 Test conditions	7			
	5.2 Measuring instruments	7			
	5.3 Conformity of components	7			
	5.4 Type tests	7			
	5.5 Routine tests				
6	Protection against electric shock				
	6.1 Insulation				
	6.2 Protection against electric shock in normal service (direct contact)				
_	6.3 Protection against electric shock in case of a fault condition (indirect contact)				
7	Thermal requirements				
8	Abnormal operation Coh. S.T.A.N.D.A.R.D. P.R.E.V.I.E.W.				
9	Thermal protection	10			
10					
11	Output <u>SIST EN 60974-3 2008</u>				
	11.1 Rated peak voltageds itehai/catalog/standards/sist/952c9a1e-1/3c-48a4-b943-	10			
	11.2 Impulse current <u>a62dd69f5818/sist-en-60974-3-2008</u>				
	11.3 Mean energy				
12	11.4 Output circuit capacitance discharging				
13	Hazard reducing device				
14	Mechanical provisions				
15	Rating plate				
	Adjustment of the output				
17	Instructions and markings				
	17.1 Instructions				
	17.2 Markings	17			
۸ "۰	acy A (informative). Evennles of counting evetene for are striking and stabilizing				
	nex A (informative) Examples of coupling systems for arc striking and stabilizing vices	18			
	nex B (informative) Example of a rating plate				
	(
Fig	ure 1 – Rated peak voltage	10			
Fig	Figure 2 – Measurement of electric charge of impulse current				
Fig	ure 3 – Arc striking and stabilizing voltage	12			
_	ure 4 – Measuring circuit for direct contact				
	ure 5 – Measuring circuit for serial contact				
_	ure 6 – Measuring circuit for capacitance discharging				

Figure A.1 – Examples of coupling systems for arc striking and stabilizing devices	. 18
Figure B.1 – Stand-alone unit	. 19
Table 1 – Minimum clearances and creepage distances for arc striking and stabilizing circuits	8
Table 2 – Maximum rated peak voltages	. 11

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60974-3:2008 https://standards.iteh.ai/catalog/standards/sist/952c9a1e-1f3c-48a4-b943-a62dd69f5818/sist-en-60974-3-2008

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT -

Part 3: Arc striking and stabilizing devices

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- The formal decisions or agreements of 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 IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEO Publication 220 a1e-113c-48a4-b943-
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60974-3 has been prepared by IEC technical committee 26: Electric welding.

This second edition cancels and replaces the first edition published in 2003 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- changes induced by the publication of IEC 60974-1, edition 3;
- routine test for built-in unit (see 5.5.2);
- clarification of calculation of the rated peak voltage (see 11.1 and Figure 1).

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

FDIS	Report on voting	
26/363/FDIS	26/367/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.

This part of IEC 60974 shall be read in conjunction with IEC 60974-1.

The list of all the parts of IEC 60974, under the general title Arc welding equipment, can be found on the IEC web site.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

(standards.iteh.ai)

SIST EN 60974-3:2008 https://standards.iteh.ai/catalog/standards/sist/952c9a1e-1f3c-48a4-b943a62dd69f5818/sist-en-60974-3-2008