ICS 25.160.30 SLOVENSKÁ TECHNICKÁ NORMA Marec 2020

STN	**Zariadenia na oblúkové zváranie Časť 3: Zariadenia na štartovanie a stabilizáciu oblúka**	**STN EN IEC 60974-3 05 2205**

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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/20

Obsahuje: EN IEC 60974-3:2019, IEC 60974-3:2019

Oznámením tejto normy sa od 08.11.2022 ruší
STN EN 60974-3 (05 2205) zo septembra 2014

130269

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60974-3

November 2019

ICS 25.160.30

Supersedes EN 60974-3:2014 and all of its amendments and corrigenda (if any).

English Version

Arc welding equipment - Part 3: Arc striking and stabilizing devices (IEC 60974-3:2019)

Matériel de soudage à l'arc - Partie 3: Dispositifs d'amorçage et de stabilisation de l'arc (IEC 60974-3:2019)

Lichtbogenschweißeinrichtungen - Teil 3: Lichtbogenzünd- und -stabilisierungseinrichtungen (IEC 60974-3:2019)

This European Standard was approved by CENELEC on 2019-03-06. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 60974-3:2019 E

EN IEC 60974-3:2019 (E)

European foreword

The text of document 26/671/FDIS, future edition 4 of IEC 60974-3, prepared by IEC/TC 26 "Electric welding" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60974-3:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-05-08
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-11-08

This document supersedes EN 60974-3:2014 and all of its amendments and corrigenda (if any).

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

Endorsement notice

The text of the International Standard IEC 60974-3:2019 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 60974 (series)	NOTE	Harmonized as EN IEC 60974 (series)
IEC 60384-14	NOTE	Harmonized as EN 60384-14

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60974-1	2017	Arc welding equipment - Part 1: Welding power sources	EN IEC 60974-1	2018
+ A1	2019		+ A1	2019
IEC 60974-7	2013	Arc welding equipment - Part 7: Torches	EN 60974-7	2013
IEC 61140	-	Protection against electric shock - Common aspects for installation and equipment	EN 61140	2016

Annex ZZ
(informative)

Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Table ZZ.1 – Correspondence between this European standard and Annex I of Directive 2014/35/EU [2014 OJ L96]

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1(a)	Clauses 15, 17	
1(b)	Clause 17.1	
1(c)		Testing during periodic maintenance or after repair is covered in separate standards
2(a)	Clauses 6.1, 6.2, 6.3, 10, 11, 12, 17.1	
2(b)	Clauses 6.1, 6.2, 6.3, 7, 11, 12	Hazards arising from electric, magnetic, and electromagnetic fields, other ionizing and non-ionizing radiation are covered in separate standards
2(c)	Clauses 6.2, 9, 10,14	Acoustic noise is covered in separate standards
2(d)	Clause 6.1	
3(a)	Clause 14	
3(b)	Clauses 4, 6.2, 10, 14	Functional safety is covered in separate standards Safety-related security is covered in separate standards
3(c)	Clause 9	

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

IEC 60974-3

Edition 4.0 2019-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

Matériel de soudage à l'arc –
Partie 3: Dispositifs d'amorçage et de stabilisation de l'arc

IEC 60974-3:2019-01(en-fr)

IEC 60974-3

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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.
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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 fourth edition cancels and replaces the third edition published in 2013 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 60974-1:2017;
- reference to IEC 60974-1:2017/AMD1:2019in Clause 2;
- Figure 2 is updated where a subtraction of the proportion of the no-load voltage is shown;
- requirement for safe operation of the arc striking and stabilising devices in the event of failure, in 11.5;
- requirements for the rating plate as in IEC 60974-1:2017, Clause 15.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
26/671/FDIS	26/676/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this document, the following print types are used:

– conformity statements: in *italic* type.
– terms used throughout this document which have been defined in Clause 3: SMALL CAPITALS.

This International Standard is to be read in conjunction with IEC 60974-1:2017.

A list of all the parts in the IEC 60974 series, published under the general title *Arc welding equipment*, can be found on the IEC website.

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

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

ARC WELDING EQUIPMENT –

Part 3: Arc striking and stabilizing devices

1 Scope

This part of IEC 60974 specifies safety requirements for industrial and professional ARC STRIKING and ARC STABILIZING DEVICES used in arc welding and allied processes.

This document is applicable to ARC STRIKING and STABILIZING DEVICES which are stand-alone (separate from the welding equipment) or built in (housed in a single enclosure with other arc welding equipment).

NOTE 1 Typical allied processes are, for example, plasma arc cutting and arc spraying.

NOTE 2 This document does not include electromagnetic compatibility (EMC) requirements.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60974-1:2017, *Arc welding equipment – Part 1: Welding power sources*
IEC 60974-1:2017/AMD1:2019

IEC 60974-7:2013, *Arc welding equipment – Part 7: Torches*

IEC 61140, *Protection against electric shock – Common aspects for installation and equipment*