



**SLOVENSKI STANDARD
SIST EN IEC 60974-13:2021**

01-september-2021

**Nadomešča:
SIST EN 60974-13:2011**

Oprema za obločno varjenje - 13. del: Ročne klešče za varilni tok (IEC 60974-13:2021)

Arc welding equipment - Part 13: Welding current return clamp (IEC 60974-13:2021)

Lichtbogenschweißeinrichtungen - Teil 13: Schweißstromrückleitungsklemmen (IEC 60974-13:2021)

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Matériel de soudage à l'arc - Partie 13: Connecteur de pièce (IEC 60974-13:2021)

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Ta slovenski standard je istoveten z: EN IEC 60974-13:2021

ICS:

25.160.30 Varilna oprema Welding equipment

SIST EN IEC 60974-13:2021 en

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EUROPEAN STANDARD

EN IEC 60974-13

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2021

ICS 25.160.30

Supersedes EN 60974-13:2011 and all of its
amendments and corrigenda (if any)

English Version

**Arc welding equipment - Part 13: Welding current return clamp
(IEC 60974-13:2021)**Matériel de soudage à l'arc - Partie 13: Connecteur de
pièce
(IEC 60974-13:2021)Lichtbogenschweißeinrichtungen - Teil 13:
Schweißstromrückleitungsklemmen
(IEC 60974-13:2021)

This European Standard was approved by CENELEC on 2021-05-20. 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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

EN IEC 60974-13:2021 (E)**European foreword**

The text of document 26/717/FDIS, future edition 2 of IEC 60974-13, prepared by IEC/TC 26 "Electric welding" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60974-13:2021.

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) 2022-02-20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-05-20

This document supersedes EN 60974-13:2011 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.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

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Endorsement notice

SIST EN IEC 60974-13:2021

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The text of the International Standard IEC 60974-13:2021 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 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-151	2001	International Electrotechnical Vocabulary – Part 151: Electrical and magnetic devices (available at: http://www.electropedia.org)	-	-
+ A1	2013		-	-
+ A2	2014		-	-
+ A3	2019		-	-
+ A4	2020		-	-
IEC 60974-1	2017	Arc welding equipment – Part 1: Welding power source	EN60974-1	2018
+ A1	2019		+ A1	2019

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 10 and 11	
1(b)	Clause 11	
1(c)	Clauses 6, 8, and 9	
2(a)	Clause 7 and 8	
2(b)	Clauses 7 and 8	
2(c)	Clauses 8.2 and 9	
2(d)	Clause 8.2	
3(a)	Clause 9	
3(b)	Clauses 8.2	Functional safety is covered in separate standards Safety-related security is covered in separate standards
3(c)	Clause 8	

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.



INTERNATIONAL STANDARD

Arc welding equipment –
Part 13: Welding current return clamp

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INTERNATIONAL
ELECTROTECHNICAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 13: Welding current return clamp

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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International Standard IEC 60974-13 has been prepared by IEC technical committee 26: Electric welding.

This second edition cancels and replaces the first edition, published in 2011, and constitutes a technical revision.

The significant technical changes with respect to the previous edition are the following:

- Modified the title from "Welding clamp" to "Welding current return clamp" and updated the term through the document.
- Updated all values of test current in Table 1 corrected to 40 °C.
- Updated the reference to EN 50565-1:2014, *Electric cables – Guide to use for cables with a rated voltage not exceeding 450/750 V (U0/U) – Part 1: General guidance*

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

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

FDIS	Report on voting
26/717/FDIS	26/722/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 standard, the following print types are used:

- conformity statements: in *italic type*.
- terms defined in Clause 3: in SMALL ROMAN CAPITALS.

A list of all parts of 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.

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