

KAARKEEVITUSSEADMED. OSA 13: KEEVITUSVOOLU
MAANDUSKLAMBER

Arc welding equipment - Part 13: Welding current
return clamp

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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EN IEC 60974-13

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2021

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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)

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-05-20

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

Endorsement notice

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INTERNATIONAL STANDARD

**Arc welding equipment –
Part 13: Welding current return clamp**



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INTERNATIONAL STANDARD

**Arc welding equipment –
Part 13: Welding current return clamp**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 13: Welding current return clamp

FOREWORD

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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.

ARC WELDING EQUIPMENT –

Part 13: Welding current return clamp

1 Scope

This part of IEC 60974 is applicable to WELDING CURRENT RETURN CLAMPS for arc welding processes, designed to make an electrical connection to the workpiece without using tools.

This document is not applicable to WELDING CURRENT RETURN CLAMPS for underwater welding and plasma cutting.

This document specifies safety and performance requirements of WELDING CURRENT RETURN CLAMPS.

This document does not specify requirements for welding cables.

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

IEC 60050-151:2001/AMD1:2013

IEC 60050-151:2001/AMD2:2014

IEC 60050-151:2001/AMD3:2019

IEC 60050-151:2001/AMD4:2020

IEC 60974-1:2017, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-1:2017/AMD1:2019

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-151, IEC 60974-1, as well as the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

WELDING CURRENT RETURN CLAMP

WORK CLAMP, US

RETURN CURRENT CLAMP, UK

clamp that is attached to, or in contact with, the workpiece, to connect the welding return cable to the workpiece

[SOURCE: IEC 60050-851:2008, 851-14-36]