

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Arc welding equipment –
Part 12: Coupling devices for welding cables**

**Matériel de soudage à l'arc –
Partie 12: Dispositifs de connexion pour câbles de soudage**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 12: Coupling devices for welding cables

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IEC 60974-12 has been prepared by IEC technical committee 26: Electric welding. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2011. This edition constitutes a technical revision.

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

- a) updated Table 1 to include 100 % duty cycle;
- b) updated Annex A to provide more detail.

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

Draft	Report on voting
26/734/FDIS	26/736/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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 ROMAN CAPITALS.

A list of all parts of the IEC 60974 series can be found, under the general title *Arc welding equipment*, 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 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- withdrawn,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 12: Coupling devices for welding cables

1 Scope

This part of IEC 60974 is applicable to COUPLING DEVICES for cables used in arc welding and allied processes, designed for connection and disconnection without using tools.

This part of IEC 60974 specifies safety and performance requirements of COUPLING DEVICES.

This part of IEC 60974 is not applicable to COUPLING DEVICES for underwater welding.

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

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60974-1:2021, *Arc welding equipment – Part 1: Welding power sources*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-151 and 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

COUPLING DEVICE

device connecting two welding cables together or connecting a welding cable to welding equipment

3.2

RETAINING MEANS

mechanical arrangement that holds the COUPLING DEVICE in position and prevents an unintentional withdrawal, when properly connected

3.3

ARC STRIKING VOLTAGE

voltage superimposed on the welding circuit to ignite the arc