

Arc welding equipment —

Part 12: Coupling devices for welding cables

The European Standard EN 60974-12:2005 has the status of a
British Standard

ICS 25.160

National foreword

This British Standard is the official English language version of EN 60974-12:2005. It is identical with IEC 60974-12:2005. It supersedes BS EN 60974-12:1996 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/6, Electric arc welding equipment, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 14, an inside back cover and a back cover.

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English version

Arc welding equipment
Part 12: Coupling devices for welding cables
(IEC 60974-12:2005)

Matériel de soudage à l'arc
Partie 12: Dispositifs de connexion
pour câbles de soudage
(CEI 60974-12:2005)

Lichtbogenschweißeinrichtungen
Teil 12: Steckverbindungen
für Schweißleitungen
(IEC 60974-12:2005)

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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.

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 Central Secretariat has the same status as the official versions.

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CENELEC

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

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Foreword

The text of document 26/303/FDIS, future edition 2 of IEC 60974-12, prepared by IEC TC 26, Electric welding, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60974-12 on 2005-07-01.

This European Standard supersedes EN 60974-12:1995.

Major changes with respect to EN 60974-12:1995 are the following:

- an operation capability requirement has been added to item b) of Clause 4;
- Tables 1 and 6 have slightly changed values and consider only a 60 % duty cycle;
- Subclause 7.1 “Voltage rating” has been newly introduced;
- under 7.3 “Dielectric strength”, the paragraphs 2 and 5 are newly introduced to consider arc striking and stabilizing devices;
- examples and design recommendations have been removed from the normative part of the document and introduced in Annex A.

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) | 2006-04-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2008-07-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60974-12:2005 was approved by CENELEC as a European Standard without any modification.

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ARC WELDING EQUIPMENT –

Part 12: Coupling devices for welding cables

1 Scope

This part of IEC 60974 is applicable to coupling devices for cables for 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 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.

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, *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, IEC 60974-1, as well as the following apply.

3.1

coupling device

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

3.2

rated current

current assigned by the manufacturer that the coupling device can accept at 60 % duty cycle without exceeding the permitted temperature rise

3.3

retaining means

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

3.4

arc striking and stabilizing voltage

voltage superimposed on the welding circuit to initiate or maintain the arc