

SLOVENSKI STANDARD**SIST EN 60974-12:1999****01-julij-1999**

Arc welding equipment – Part 12: Coupling devices for welding cables (IEC 60974-12:1992, modified)

Arc welding equipment -- Part 12: Coupling devices for welding cables

Lichtbogenschweißeinrichtungen -- Teil 12: Steckverbindungen für Schweißleitungen

Matériel de soudage électrique -- Partie 12: Dispositifs de connexion pour câbles de soudage

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ICS:

25.160.30 Varilna oprema Welding equipment

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**EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM**

EN 60974-12

August 1995

ICS 25.160.30

Supersedes HD 433 S1:1983

Descriptors: Electrical welding, arc welding, coupling device, safety, construction

English version

**Arc welding equipment
Part 12: Coupling devices for welding cables
(IEC 974-12:1992, modified)**

Matériel de soudage électrique
Partie 12: Dispositifs de connexion pour
câbles de soudage
(CEI 974-12:1992, modifiée)

Lichtbogenschweißeinrichtungen
Steckverbindungen für
Schweißleitungen
(IEC 974-12:1992, modifiziert)

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This European Standard was approved by CENELEC on 1995-02-15. 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 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 974-12:1992, prepared by IEC TC 26, Electric welding, together with common modifications prepared by the Technical Committee CENELEC TC 26A, Electric arc welding, was submitted to the formal vote and was approved by CENELEC as EN 60974-12 on 1995-02-15.

This European Standard supersedes HD 433 S1:1983.

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) 1995-12-01
- latest date by which national standards conflicting with the EN have to be withdrawn (dow) 1995-12-01

For products which have complied with HD 433 S1:1983 before 1995-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-12-01.

Annexes designated "normative" are part of the body of the standard.

In this standard, annex ZA is normative.

Annex ZA has been added by CENELEC. It lists the normative references for this standard.

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Endorsement notice

The text of the International Standard IEC 974-12:1992 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS**1 Scope and object**

Delete "and object" from the title.
Replace "IEC 974" by "EN 60974".
Delete the last paragraph.

3 Definitions

Replace "IEC 974" by "EN 60974".

3.1.2 equipment coupler

Delete in the first line of a) "either".
Transfer "or" from the first line of b) to a new line of a):

a) ...

or

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4.1 Sequence of tests

Replace "IEC 974" by "EN 60974"
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5 Designation

Replace the first paragraph, table 1 and note 1 by:
Coupling devices shall be designed according to their minimum fitting range, which shall correspond to the rated current as given in table 1.

Table 1 - Relation between size range and rated current

Minimum range of size mm ²	Rated current in A	
	60 % duty cycle	100 % duty cycle
up to 10	101	100
10 to 16	139	135
16 to 25	190	180
25 to 35	243	225
35 to 50	316	285
50 to 70	403	355
70 to 95	498	430
95 to 120	587	500
120 to 150	689	580
150 to 185	797	665

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NOTES

- 1 The indicated current values, according to HD 516 S1/A3 correspond to the upper value of the size range.

Replace in Note 2 at the end of the second line "in" by "at" an ambient air temperature ...

6.3 Dielectric strength

Replace in the first line "flash-over" by "flashover".

7.1 Temperature rise

Replace the compliance line by:

Compliance is checked at the rated current corresponding to a 60 % duty cycle (duty factor) by the following test:

Replace in the next paragraph "2m-long" by " 2m long".

Replace the last paragraph by:

A dc current equal to 75 % of the rated current (corresponding to a 60 % duty cycle (duty factor), see table 1) is passed through the coupling device until the rate of the temperature rise does not exceed 2 K/h.

7.2 Resistance to weld spatter

In the second paragraph between "checked" and "with" add "by the following test".

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Replace in the second line of the last paragraph "at a temperature of 300 + 5/0 °C" by "at a temperature $\Theta = 300 + 5/0$ °C".

8.3 Penetration of the welding cable insulation

In the last paragraph, replace "according to" by "using".

9 Marking

Under d) replace "IEC 974" by "EN 60974".

Replace the second paragraph by:

For coupling devices designed for a maximum cross-sectional area up to 16 mm², the dimensions of which are such that it is not possible to put on all the markings clearly, item c) can be omitted and shown on the packing or in the literature.

Annex ZA (normative)**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
-	-	Guide to use of low-voltage harmonised cables	HD 516 S1 A3	1990 1993

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60974-12

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Matériel de soudage électrique

**Partie 12:
Dispositifs de connexion pour câbles de soudage**

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Arc-welding equipment
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Part 12:

Coupling devices for welding cables

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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For price, see current catalogue*

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