

Arc welding equipment —

Part 3: Arc striking and stabilizing devices

ICS 25.160.30

National foreword

This British Standard is the UK implementation of EN 60974-3:2007. It is identical to IEC 60974-3:2007. It supersedes BS EN 60974-3:2003 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/6, Electric arc welding equipment.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 April 2008

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ISBN 978 0 580 56027 9

Amendments/corrigenda issued since publication

Date	Comments

English version

**Arc welding equipment -
Part 3: Arc striking and stabilizing devices
(IEC 60974-3:2007)**

Matériel de soudage à l'arc -
Partie 3: Dispositifs d'amorçage
et de stabilisation de l'arc
(CEI 60974-3:2007)

Lichtbogenschweißeinrichtungen -
Teil 3: Lichtbogenzünd- und
-stabilisierungseinrichtungen
(IEC 60974-3:2007)

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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 26/363/FDIS, future edition 2 of IEC 60974-3, prepared by IEC TC 26, Electric welding, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60974-3 on 2007-12-01.

This European Standard supersedes EN 60974-3:2003.

EN 60974-3:2007 includes the following significant technical changes with respect to EN 60974-3:2003:

- changes induced by the publication of EN 60974-1:2005;
- routine test for built-in unit (see 5.5.2);
- clarification of calculation of the rated peak voltage (see 11.1 and Figure 1).

This standard is to be used in conjunction with EN 60974-1:2005.

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) 2008-09-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2010-12-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60974-3:2007 was approved by CENELEC as a European Standard without any modification.

CONTENTS

1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Environmental conditions.....	6
5	Tests	6
5.1	Test conditions	6
5.2	Measuring instruments	6
5.3	Conformity of components	6
5.4	Type tests	6
5.5	Routine tests	6
6	Protection against electric shock	7
6.1	Insulation	7
6.2	Protection against electric shock in normal service (direct contact)	8
6.3	Protection against electric shock in case of a fault condition (indirect contact)	8
7	Thermal requirements.....	8
8	Abnormal operation	8
9	Thermal protection	9
10	Connection to the input supply network	9
11	Output	9
11.1	Rated peak voltage	9
11.2	Impulse current	10
11.3	Mean energy	13
11.4	Output circuit capacitance discharging	13
12	Control circuits	14
13	Hazard reducing device	14
14	Mechanical provisions	14
15	Rating plate.....	14
16	Adjustment of the output.....	15
17	Instructions and markings.....	15
17.1	Instructions	15
17.2	Markings	16
Annex A (informative) Examples of coupling systems for arc striking and stabilizing devices		17
Annex B (informative) Example of a rating plate.....		18
Annex ZA (normative) Normative references to international publications with their corresponding European publications		19
Figure 1 – Rated peak voltage		9
Figure 2 – Measurement of electric charge of impulse current		10
Figure 3 – Arc striking and stabilizing voltage		11
Figure 4 – Measuring circuit for direct contact.....		11

Figure 5 – Measuring circuit for serial contact.....	13
Figure 6 – Measuring circuit for capacitance discharging	14
Figure A.1 – Examples of coupling systems for arc striking and stabilizing devices.....	17
Figure B.1 – Stand-alone unit	18
Table 1 – Minimum clearances and creepage distances for arc striking and stabilizing circuits.....	7
Table 2 – Maximum rated peak voltages	10

ARC WELDING EQUIPMENT –

Part 3: Arc striking and stabilizing devices

1 Scope

This part of IEC 60974 specifies safety requirements for industrial and professional arc striking and arc stabilizing devices used in arc welding and allied processes.

This part of IEC 60974 is applicable to stand-alone arc striking and arc stabilizing devices that are either connected to a separate welding power source or built into the welding power source enclosure.

NOTE 1 Typical allied processes are for example plasma arc cutting and arc spraying.

NOTE 2 This standard does not include electromagnetic compatibility (EMC) requirements.

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 60974-1:2005, *Arc welding equipment – Part 1: Welding power sources*

IEC 60974-7:2005, *Arc welding equipment – Part 7: Torches*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60974-1 and IEC 60974-7, as well as the following, apply.

3.1

arc striking device

device which superimposes a voltage on the welding circuit to ignite an arc

3.2

arc stabilizing device

device which superimposes a voltage on the welding circuit to maintain an arc

3.3

arc striking voltage

voltage superimposed on the no-load voltage to ignite an arc

3.4

arc stabilizing voltage

voltage superimposed on the arc voltage to maintain the arc

3.5

arc striking period

period during which the arc striking voltage is superimposed on the no-load voltage