ANSI/IEC 60974-3-2009

American National Standard for Arc Welding Equipment

Part 3: Arc Striking and Stabilizing Devices
ANSI/IEC 60974-3-2009

Arc Welding Equipment—
Part 3: Arc Striking and Stabilizing Devices

Published by
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FOREWORD FOR U.S. ADOPTION

This American National Standard is an adoption of IEC 60974-3 edition 2, Arc welding equipment —Part 3: Arc striking and stabilizing devices, and was developed and approved in accordance with procedures set forth by the American National Standards Institute. It is the intention that this American National Standard be a standalone document, replacing the use of IEC 60974-3 in the U.S. As such, any reference in this standard to an IEC 60974 part is understood to mean a reference to the equivalent ANSI/IEC 60974 part, where it exists.

This standard contains all the original text as-is from IEC 60974-3, edition 2, in addition to a number of U.S. Differences to the IEC standard that were identified by Accredited Standards Committee W1, Requirements for Apparatus Designed for Use in Arc Welding, Plasma Arc Cutting, and Allied Processes. Each U.S. Difference is found both in a compilation of U.S. Differences following this foreword, and inserted in the appropriate place(s) in the standard relating to the difference. Each insertion is in red text and is marked by three lines on its left (two thin, one thick). Each difference is identified with the following format:

[Clause/Subclause Number]DV.[Number of Difference for the Given Clause/Subclause]

Following this format, the example 17.1DV.3 signifies that it is the third U.S. Difference to subclause 17.1.

Suggestions for the improvement of this standard are welcome and should be submitted to the Secretariat of Accredited Standards Committee W1 as follows:

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This standard was processed and approved by the Accredited Standards Committee W1. Committee approval does not necessarily imply that all Committee members voted for its approval. At the time this standard was published, Accredited Standards Committee W1 consisted of the following members:

John Freudenberg, Chairman
Wayne Hoffman, Vice Chairman
Greg Winchester, Secretary

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<td>CSA Intenational</td>
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<td>Mike Madsen – alternate</td>
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<td>John Freudenberg</td>
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<td></td>
<td>Wayne Hoffman</td>
</tr>
</tbody>
</table>

Wayne Hoffman, Consultant / U.S. Technical Advisor, IEC TC 26
# CONTENTS

**FOREWORD** ....................................................................................................................... 4

1 Scope .................................................................................................................................. 11
2 Normative references ......................................................................................................... 11
3 Terms and definitions ......................................................................................................... 11
4 Environmental conditions ................................................................................................. 12
5 Tests ................................................................................................................................... 12
   5.1 Test conditions ........................................................................................................... 12
   5.2 Measuring instruments ............................................................................................ 12
   5.3 Conformity of components ..................................................................................... 12
   5.4 Type tests ................................................................................................................. 12
   5.5 Routine tests ............................................................................................................ 13
6 Protection against electric shock ....................................................................................... 13
   6.1 Insulation .................................................................................................................. 13
   6.2 Protection against electric shock in normal service (direct contact) ....................... 14
   6.3 Protection against electric shock in case of a fault condition (indirect contact) ...... 15
7 Thermal requirements ....................................................................................................... 15
8 Abnormal operation ........................................................................................................... 15
9 Thermal protection ........................................................................................................... 15
10 Connection to the input supply network ........................................................................ 15
11 Output ............................................................................................................................. 16
   11.1 Rated peak voltage ................................................................................................. 16
   11.2 Impulse current ...................................................................................................... 16
   11.3 Mean energy ............................................................................................................ 19
   11.4 Output circuit capacitance discharging ................................................................ 20
12 Control circuits ................................................................................................................ 20
13 Hazard reducing device .................................................................................................... 20
14 Mechanical provisions ..................................................................................................... 21
15 Rating plate ..................................................................................................................... 21
16 Adjustment of the output ................................................................................................. 22
17 Instructions and markings ............................................................................................... 22
   17.1 Instructions ............................................................................................................. 22
   17.2 Markings ................................................................................................................ 22

Annex A (informative)  Examples of coupling systems for arc striking and stabilizing devices ........................................................................................................................ 23
Annex B (informative)  Example of a rating plate ................................................................. 24

Figure 1 – Rated peak voltage .............................................................................................. 16
Figure 2 – Measurement of electric charge of impulse current ........................................ 17
Figure 3 – Arc striking and stabilizing voltage .................................................................... 17
Figure 4 – Measuring circuit for direct contact .......................................................................18
Figure 5 – Measuring circuit for serial contact .......................................................................19
Figure 6 – Measuring circuit for capacitance discharging ......................................................20
Figure A.1 – Examples of coupling systems for arc striking and stabilizing devices ..............23
Figure B.1 – Stand-alone unit ...............................................................................................24

Table 1 – Minimum clearances and creepage distances for arc striking and stabilizing
circuits ........................................................................................................................................14
Table 2 – Maximum rated peak voltages ...............................................................................16
INTERNATIONAL ELECTROTECHNICAL COMMISSION

ARC WELDING EQUIPMENT –

Part 3: Arc striking and stabilizing devices

FOREWORD

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International Standard IEC 60974-3 has been prepared by IEC technical committee 26: Electric welding.

This second edition cancels and replaces the first edition published in 2003 and constitutes a technical revision.

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

- changes induced by the publication of IEC 60974-1, edition 3;
- routine test for built-in unit (see 5.5.2);
- clarification of calculation of the rated peak voltage (see 11.1 and Figure 1).
The text of this standard is based on the following documents:

<table>
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<tr>
<th>FDIS</th>
<th>Report on voting</th>
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<tr>
<td>26/363/FDIS</td>
<td>26/367/RVD</td>
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Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part of IEC 60974 shall be read in conjunction with IEC 60974-1.

The list of all the parts of IEC 60974, under the general title Arch welding equipment, can be found on the IEC web site.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under “http://webstore.iec.ch” in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

Foreword

Modify the foreword by adding the following:

The numbering system in this standard uses a space instead of a comma to indicate thousands and uses a comma instead of a period to indicate a decimal point. For example, 1 000 means 1,000 and 1,01 means 1.01.
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.