BS EN 60974-3:2014



BSI Standards Publication

Arc welding equipment

Part 3: Arc striking and stabilizing devices

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National foreword

This British Standard is the UK implementation of EN 60974-3:2014. It is identical to IEC 60974-3:2013. It supersedes BS EN 60974-3:2007 which is withdrawn.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.

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Lichtbogenschweißeinrichtungen - Teil 3: Lichtbogenzünd- und -stabilisierungseinrichtungen (IEC 60974-3:2013)

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Foreword

The text of document 26/518/FDIS, future edition 3 of IEC 60974-3, prepared by IEC/TC 26 "Electric welding" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60974-3:2014.

The following dates are fixed:

– latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-09-30
– latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-12-31

This document supersedes EN 60974-3:2007.

EN 60974-3:2014 includes the following significant technical changes with respect to EN 60974-3:2007:

– changes induced by the publication of IEC 60974-1:2012.

This standard is to be read in conjunction with EN 60974-1:2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 60974-3:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 60974	NOTE	Harmonized in EN 60974 series (not modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

Publication	Year	Title	EN/HD	Year
IEC 60974-1	2012	Arc welding equipment Part 1: Welding power sources	EN 60974-1	2012
IEC 60974-7	-	Arc welding equipment Part 7:Torches	EN 60974-7	-
IEC 61140	-	Protection against electric shock - Common aspects for installation and equipment	EN 61140	-

CONTENTS

1 Scope 6
2 Normative references 6
3 Terms and definitions 6
4 Environmental conditions 7
5 Tests 7
5.1 Test conditions 7
5.2 Measuring instruments 7
5.3 Conformity of components 7
5.4 Type tests 7
5.5 Routine tests 7
5.5.1 Stand-alone unit 7
5.5.2 Built-in unit 8
6 Protection against electric shock 8
6.1 Insulation 8
6.1.1 General 8
6.1.2 Clearances 8
6.1.3 Creepage distances 8
6.1.4 Insulation resistance 9
6.1.5 Dielectric strength 9
6.2 Protection against electric shock in normal service (direct contact) 10
6.3 Protection against electric shock in case of a fault condition (indirect contact) 10
6.4 Protective provision 10
7 Thermal requirements 10
8 Thermal protection 10
9 Abnormal operation 10
10 Connection to the supply network 11
11 Output 11
11.1 Rated peak voltage 11
11.2 Impulse current 12
11.2.1 Risk of electric shock 12
11.2.2 Electric charge 12
11.2.3 Direct contact 12
11.2.4 Series contact 13
11.3 Mean energy 14
11.4 Output circuit capacitance discharging 15
12 Control circuits 15
13 Hazard reducing device 15
14 Mechanical provisions 15
15 Rating plate 15
16 Adjustment of the output 16
17 Instructions and markings 16
17.1 Instructions 16
17.2 Markings 17

Annex A (informative) Examples of coupling systems for arc striking and stabilizing devices 18
Annex B (informative) Example of a rating plate 19
Bibliography 20

Figure 1 – Rated peak voltage 11
Figure 2 – Measurement of electric charge of impulse current 12
Figure 3 – Measuring circuit for direct contact 13
Figure 4 – Measuring circuit for serial contact 14
Figure 5 – Measurement of mean energy 14
Figure 6 – Measuring circuit for capacitance discharging 15
Figure A.1 – Examples of coupling systems for arc striking and stabilizing devices 18
Figure B.1 – Stand-alone unit 19

Table 1 – Minimum clearances and creepage distances for arc striking and stabilizing circuits 9
Table 2 – Maximum peak voltages 11

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 units which may be connected to a separate welding power source or one where the welding power source and the arc striking and arc stabilizing device are housed in a single 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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60974-1:2012, *Arc welding equipment – Part 1: Welding power sources*

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

IEC 61140, *Protection against electric shock – Common aspects for installation and equipment*

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