BSI Standards Publication

Arc welding equipment

Part 10: Electromagnetic compatibility (EMC) requirements

bsi.

National foreword

This British Standard is the UK implementation of EN IEC 60974-10:2021. It is identical to IEC 60974-10:2020. It supersedes BS EN 60974-10:2014 +A1:2015, which is withdrawn.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 committee manager.

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UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

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

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Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD **EN IEC 60974-10**

EUROPÄISCHE NORM

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Supersedes EN 60974-10:2014 and all of its amendments and corrigenda (if any)

English Version

Arc welding equipment - Part 10: Electromagnetic compatibility (EMC) requirements (IEC 60974-10:2020)

Matériel de soudage à l'arc - Partie 10: Exigences de compatibilité électromagnétique (CEM) (IEC 60974-10:2020)

Lichtbogenschweißeinrichtungen - Teil 10: Anforderungen an die elektromagnetische Verträglichkeit (EMV) (IEC 60974-10:2020)

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

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European foreword

The text of document 26/695/FDIS, future edition 4 of IEC 60974-10, prepared by IEC/TC 26 "Electric welding" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60974-10:2021.

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) 2022-08-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-11-10

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Endorsement notice

The text of the International Standard IEC 60974-10:2020 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60417	NOTE	Harmonized as HD 243 S7
IEC 60974-9:2018	NOTE	Harmonized as EN IEC 60974-9:2018 (not modified)
CISPR 32:2015	NOTE	Harmonized as EN 55032:2015 (not modified) + A11:2020

(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60974-1	2017	Arc welding equipment - Part 1: Welding power sources	EN IEC 60974-1	2018
+ A1	2019		+ A1	2019
IEC 60974-6	2015	Arc welding equipment - Part 6: Limited duty equipment	EN 60974-6	2016
IEC 61000-3-2	2018	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current -16 A per phase)	EN IEC 61000-3-2	2019
IEC 61000-3-3	2013	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection	EN 61000-3-3	2013
+ A1	2017		+ A1	2019
IEC 61000-3-11	2017		EN IEC 61000-3-11	2019
IEC 61000-3-12	2011	Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16 A and ≤ 75 A per phase	EN 61000-3-12	2011
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) - Part 4-3 : Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006
+ A1	2007		+ A1	2008
+ A2	2010		+ A2	2010

IEC 61000-4-4	2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2012
IEC 61000-4-5	2014	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2014
+ A1	2017		+ A1	2017
IEC 61000-4-6	2013	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2014
IEC 61000-4-11	2004	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	2004
+ A1	2017		+ A1	2017
IEC 61000-4-34	2005	Electromagnetic compatibility (EMC) - Part 4-34: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase	EN 61000-4-34	2007
+ A1	2009		+ A1	2009
IEC 61000-6-1	2016	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments	EN IEC 61000-6-1	2019
IEC 61000-6-2	2016	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments	EN IEC 61000-6-2	2019
IEC 61000-6-3	2006	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments	EN 61000-6-3	2007
+ A1	2010		+ A1	2011
-	-		+ AC	2012
IEC 61000-6-4	2018	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments	EN IEC 61000-6-4	2019
CISPR 11 (mod)	2015	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN 55011	2016
+ A1	2016		+ A1	2017
-	-		+ A11	2020
+ A2	2019		+ A2	2021
CISPR 14-1	2016	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	EN 55014-1	2017
-	-		+ A11	2020

CISPR 16-1-1	2019	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	EN IEC 55016-1-1	2019
CISPR 16-1-2	2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-2: Radio disturbance and immunity measuring apparatus - Coupling devices for conducted disturbance measurements	EN 55016-1-2	2014
+ A1	2017		+ A1	2018
CISPR 16-1-4	2019	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements	EN IEC 55016-1-4	2019

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Arc welding equipment –
Part 10: Electromagnetic compatibility (EMC) requirements

Matériel de soudage à l'arc –
Partie 10: Exigences de compatibilité électromagnétique (CEM)

IEC 60974-10:2020-04(en-fr)

CONTENTS