

KAARKEEVITUSSEADMED. OSA 10:
ELEKTROMAGNETILISE ÜHILDUVUSE NÕUDED

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

EESTI STANDARDI EESSÕNA

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-11-10

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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

Annex ZA (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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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

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)**



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CONTENTS

FOREWORD	5
1 Scope	7
2 Normative references	7
3 Terms and definitions	9
4 General test requirements	11
4.1 Test conditions	11
4.2 Measuring instruments	11
4.3 Artificial mains network	12
4.4 Voltage probe	12
4.5 Antennas	12
4.6 Coupling/decoupling network (CDN)	12
5 Test set-up for emission and immunity	12
5.1 General	12
5.2 Load	15
5.3 Ancillary equipment	16
5.3.1 General requirements	16
5.3.2 Wire feeders	16
5.3.3 Remote controls	16
5.3.4 Arc striking and stabilizing devices	16
5.3.5 Liquid cooling systems	17
6 Emission tests	17
6.1 Classification for RF emission tests	17
6.1.1 Class A equipment	17
6.1.2 Class B equipment	17
6.2 Test conditions	17
6.2.1 Welding power source	17
6.2.2 Load voltages	18
6.2.3 Wire feeders	19
6.2.4 Ancillary equipment	19
6.3 Emission limits	19
6.3.1 General	19
6.3.2 Mains terminal disturbance voltage	19
6.3.3 Conducted emissions at signal, control and measurement ports	21
6.3.4 Output current ripple	21
6.3.5 Electromagnetic radiation disturbance	22
6.3.6 Harmonics, voltage fluctuations and flicker	23
7 Immunity tests	25
7.1 Classification for immunity tests	25
7.1.1 Applicability of tests	25
7.1.2 Category 1 equipment	25
7.1.3 Category 2 equipment	25
7.2 Test conditions	25
7.3 Immunity performance criteria	25
7.3.1 Performance criterion A	25
7.3.2 Performance criterion B	26
7.3.3 Performance criterion C	26

7.4	Immunity levels	26
8	Documentation for the purchaser/user	28
Annex A	(informative) Installation and use	30
A.1	General.....	30
A.2	Assessment of area	30
A.3	Assessment of welding installation.....	30
A.4	Mitigation measures.....	31
A.4.1	Public supply system	31
A.4.2	Maintenance of the arc welding equipment	31
A.4.3	Welding cables	31
A.4.4	Equipotential bonding	31
A.4.5	Earthing of the workpiece	31
A.4.6	Screening and shielding	31
Annex B	(informative) Limits	32
B.1	General.....	32
B.2	Conducted disturbance voltage limits	32
B.3	Output current ripple limit.....	32
B.4	Radiated disturbance limits	32
B.5	Output current ripple limits	32
Annex C	(informative) Symbols.....	33
Annex D	(normative) Battery powered equipment.....	34
D.1	General.....	34
D.2	Additional emission requirements.....	34
D.3	Additional immunity requirements	34
Annex E	(normative) Equipment containing radio devices	35
E.1	General.....	35
E.2	Additional emission requirements.....	35
E.3	Additional immunity requirements	35
Bibliography		36
Figure 1	– Examples of ports	10
Figure 2	– Test set-up 1 for arc welding equipment.....	13
Figure 3	– Test set-up 2 for portable arc welding equipment	14
Figure 4	– Top view of test set-up as shown in Figure 2.....	15
Figure 5	– Overview of harmonic requirements for supply current $I_{1\max}$ up to 75 A.....	24
Figure 6	– Overview of flicker requirements	24
Table 1	– Mains terminal disturbance voltage limits, idle state	20
Table 2	– Mains terminal disturbance voltage limits, load conditions	21
Table 3	– Output current ripple limits for Class B arc welding power sources	22
Table 4	– Electromagnetic radiation disturbance – Idle state.....	22
Table 5	– Electromagnetic radiation disturbance – Loaded state	23
Table 6	– Immunity levels – Enclosure	26
Table 7	– Immunity levels – AC input power port.....	27
Table 8	– Immunity levels – Ports for process, signalling, measurement and control	28

Table C.1 – Symbols to describe EMC properties	33
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ARC WELDING EQUIPMENT –**Part 10: Electromagnetic compatibility (EMC) requirements**

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International Standard IEC 60974-10 has been prepared by IEC technical committee 26: Electric welding.

This fourth edition cancels and replaces the third edition published in 2014 and its Amendment 1:2015. This edition constitutes a technical revision.

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

- a) updated normative references;
- b) requirements for battery powered equipment;
- c) requirements for equipment combined with radio transmitters/receivers.

The text of this standard is based on the following documents:

FDIS	Report on voting
26/695/FDIS	26/697/RVD

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.

A list of all parts in the IEC 60974 series, published under the general title *Arc welding equipment*, can be found on the IEC web site.

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