

Resistance welding equipment - Part 2:  
Electromagnetic compatibility (EMC) requirements

## ESTI STANDARDI EESSÕNA

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN IEC 62135-2

December 2021

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Supersedes EN 62135-2:2015 and all of its amendments  
and corrigenda (if any)

English Version

Resistance welding equipment - Part 2: Electromagnetic  
compatibility (EMC) requirements  
(IEC 62135-2:2020)

Matériels de soudage par résistance - Partie 2: Exigences  
de compatibilité électromagnétique (CEM)  
(IEC 62135-2:2020)

Widerstandsschweißeinrichtungen - Teil 2: Anforderungen  
an die elektromagnetische Verträglichkeit (EMV)  
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## European foreword

The text of document 26/696/FDIS, future edition 3 of IEC 62135-2, prepared by IEC/TC 26 "Electric welding" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62135-2:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-08-10 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-11-10 document have to be withdrawn

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Dans la version officielle, ajouter dans la Bibliographie les notes suivantes pour les normes indiquées:

- IEC 60417            NOTE    Harmonisée comme HD 243 S7  
IEC 60974-9:2018    NOTE    Harmonisée comme EN IEC 60974-9:2018 (non modifiée)  
CISPR 32:2015        NOTE    Harmonisée comme EN 55032:2015 (non modifiée) + 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.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-3-2	2018	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current $\leq 16$ 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 $\leq 16$ A per phase and not subject to conditional connection	EN 61000-3-3	2013
+ A1	2017		+ A1	2019
IEC 61000-3-11	2017	Electromagnetic compatibility (EMC) - Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems - Equipment with rated current $\leq 75$ A and subject to conditional connection	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 $\leq 75$ 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
IEC 62135-1	2015	Resistance welding equipment - Part 1: Safety requirements for design, manufacture and installation	EN 62135-1	2015
ISO 669	2016	Resistance welding - Resistance welding equipment - Mechanical and electrical requirements	EN ISO 669	2016

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

**Resistance welding equipment –  
Part 2: Electromagnetic compatibility (EMC) requirements**

**Matériels de soudage par résistance –  
Partie 2: Exigences de compatibilité électromagnétique (CEM)**





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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**Resistance welding equipment –  
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**Matériels de soudage par résistance –  
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## CONTENTS

FOREWORD .....	4
1 Scope .....	6
2 Normative references .....	7
3 Terms and definitions .....	8
4 General test requirements .....	10
4.1 Test conditions .....	10
4.2 Measuring instruments .....	10
4.3 Artificial mains network .....	10
4.4 Voltage probe .....	11
4.5 Antennas .....	11
5 Test set-up for emission and immunity .....	11
5.1 General requirements .....	11
5.2 Ancillary equipment .....	12
6 Emission tests .....	12
6.1 Classification of equipment .....	12
6.1.1 Class A equipment .....	12
6.1.2 Class B equipment .....	13
6.2 Test conditions .....	13
6.2.1 Test conditions for RF tests .....	13
6.2.2 Test conditions for low-frequency tests .....	13
6.3 Emission limits .....	14
6.3.1 Mains terminal disturbance voltage .....	14
6.3.2 Electromagnetic radiation disturbance .....	16
6.3.3 Low-frequency emission limits .....	19
6.3.4 Conducted emissions at signal, control and measurement ports .....	19
7 Immunity tests .....	20
7.1 Tests applicability .....	20
7.2 Test conditions .....	20
7.3 Immunity performance criteria .....	20
7.3.1 Performance criteria A .....	20
7.3.2 Performance criteria B .....	20
7.3.3 Performance criteria C .....	21
7.4 Immunity levels .....	21
8 Documentation for the purchaser/user .....	23
Annex A (informative) Limits .....	25
A.1 General .....	25
A.2 Mains terminal disturbance voltage limits .....	25
A.3 Electromagnetic radiation disturbance limits .....	25
Annex B (informative) Symbols .....	26
Annex C (normative) Battery powered equipment .....	27
C.1 General .....	27
C.2 Additional emission requirements .....	27
C.3 Additional immunity requirements .....	27
Annex D (normative) Equipment containing radio devices .....	28
D.1 General .....	28

D.2 Additional emission requirements.....	28
D.3 Additional immunity requirements .....	28
Bibliography.....	29
 Figure 1 – Examples of ports .....	9
Figure 2 – Test position for H field measurement .....	12
 Table 1 – Disturbance voltage limits – Idle state .....	15
Table 2 – Disturbance voltage limits for Class A equipment – Loaded state .....	16
Table 3 – Electromagnetic radiation disturbance limits – Idle state.....	17
Table 4 – Electromagnetic radiation disturbance limits for Class A equipment – Loaded state .....	17
Table 5 – Electric field radiation disturbance limits for Class B equipment – Loaded state .....	18
Table 6 – Magnetic field radiation disturbance limits for Class B equipment – Loaded state .....	18
Table 7 – In-situ electromagnetic radiation disturbance limits for Class A equipment – Loaded state.....	19
Table 8 – Immunity levels – Enclosure .....	21
Table 9 – Immunity levels – AC input power port.....	22
Table 10 – Immunity levels – Ports for measurement and control.....	23
Table B.1 – Symbols to describe EMC properties.....	26

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International Standard IEC 62135-2 has been prepared by IEC technical committee 26: Electric welding.

This third edition cancels and replaces the second edition published in 2015. This edition constitutes a technical revision.

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

- a) update of the applicable limits related to the updated references;
- b) implementation of radiated magnetic field requirements.

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

FDIS	Report on voting
26/696/FDIS	26/698/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.

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