
Zaščitne naprave na residualni tok za uporabo v gospodinjstvu in podobne namene - Elektromagnetna združljivost - Dopnilo A11 (EN IEC 61543:2023/A11:2023)

Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility

Fehlerstromschutzeinrichtungen (RCDs) für Hausinstallationen und ähnliche Verwendung - Elektromagnetische Verträglichkeit

Dispositifs différentiels résiduels (DDR) pour usages domestiques et analogues - Compatibilité électromagnétique

Ta slovenski standard je istoveten z: EN IEC 61543:2023/A11:2023

ICS:

29.120.50	Varovalke in druga nadtokovna zaščita	Fuses and other overcurrent protection devices
33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 61543:2023/A11

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ICS 29.120.50; 29.020; 33.100.10

English Version

Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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EN IEC 61543:2023/A11:2023 (E)

Contents	Page
European foreword.....	3
1 Modification to the Introduction.....	4
2 Modification to Clause 1, "Scope"	4
3 Modification to Clause 4, " Electromagnetic emission of RCDs".....	4
4 Modification to 5.1, "General"	4
5 Modifications to 5.3.1, "General"	4
6 Modification to 5.3.3, "Conducted disturbances, induced by radio-frequency fields (T 3)".....	5
7 Modification to 5.3.6, "Radiated radio-frequency electromagnetic field (T 6)"	5
8 Addition of Annex A, "EMC requirements and tests for product standards under the scope of SC 23E other than RCDs"	5
9 Modification to Clause 6, "Electromagnetic emission of products within the scope of SC23E, other than RCDs", and Clause 7, "Electromagnetic immunity of products within the scope of SC23E, other than RCDs"	6
Annex ZA (normative) Normative references to international publications with their corresponding European publications.....	7

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European foreword

This document (EN IEC 61543:2023/A11:2023) has been prepared by CLC/TC 23E "Circuit breakers and similar devices for household and similar applications".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2024-04-19
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2026-04-19

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1 Modification to the Introduction

In the first and only paragraph, add "(see Annex A)" as follows:

"IEC 61543 is product family standard for RCDs Electromagnetic Compatibility and, more generally it is used as a guide (see Annex A) for other devices of the SC23E."

2 Modification to Clause 1, "Scope"

Delete the last paragraph starting with "This document is also intended" and the Note (including the list in the Note).

3 Modification to Clause 4, " Electromagnetic emission of RCDs"

At the end of Clause 4, add the following Note:

"

NOTE Annex A of this document provides guidance for EMC requirements and tests for electromagnetic emission of product within the scope of SC 23E, other than RCDs."

4 Modification to 5.1, "General"

At the end of 5.1, add the following Note:

"

NOTE Annex A of this document provides guidance for EMC requirements and tests for electromagnetic immunity of product within the scope of SC 23E, other than RCDs."

5 Modifications to 5.3.1, "General"

In Table 1, column "test level and specification", line "T 3", replace
 "level 2 : 3 V"

with

"RCCBs and RCBOs:

Level 3 – 10 V

SRCDs and PRCDs:

Level 2 – 3 V"

In Table 1, column "test level and specification", line "T 6", replace

"80 MHz to 1000 MHz: 3V/m

1,4 GHz to 6 GHz: 3V/m"

with

"RCCBs and RCBOs:

80 MHz to 1000 MHz: 10V/m

1,4 GHz to 6 GHz: 10V/m

SRCDs and PRCDs;

80 MHz to 1000 MHz: 3V/m

1,4 GHz to 6 GHz: 3V/m"

In "T 7^a", delete the footnote reference "a)" and the accompanying footnote "a In the US this test is not applicable."

6 Modification to 5.3.3, "Conducted disturbances, induced by radio-frequency fields (T 3)"

Replace the list with the following list:

"

- For RCCBs and RCBOs of $I_{\Delta n} \geq 30$ mA: 10 V
- For RCCBs and RCBOs of $I_{\Delta n} < 30$ mA: 3 V
- For SRCDs and PRCDs: 3 V
- 0,15 MHz to 80 MHz
- $Z = 150 \Omega$
- 80 % AM (1 kHz)"

7 Modification to 5.3.6, "Radiated radio-frequency electromagnetic field (T 6)"

Replace the 1st and 2nd dashes with the following:

"

- 80MHz-1000 MHz – 10V/m for RCCBs and RCBOs; 3V/m for SRCDs and PRCDs
- 1,4-6 GHz – 10V/m for RCCBs and RCBOs; 3V/m for SRCDs and PRCDs"

8 Addition of Annex A, "EMC requirements and tests for product standards under the scope of SC 23E other than RCDs"

Before Clause 6, add the following Annex A:

"

Annex A (informative)

EMC requirements and tests for product standards under the scope of SC 23E other than RCDs

A.1 General

This annex is intended to be used as a guideline in the preparation of EMC requirements and tests for product standards within the scope of SC 23E, other than RCDs. It specifies generic performance criteria intended to be transformed into specific performance criteria by the relevant product standard.

NOTE Examples of other product standards under the scope of SC 23E are:

- IEC 62020-1, *Electrical accessories – Residual current monitors (RCMs) – Part 1: RCMs for household and similar uses*;
- IEC 62606, *General requirements for arc fault detection devices*;

EN IEC 61543:2023/A11:2023 (E)

- IEC 63024, *Requirements for automatic reclosing devices (ARDs) for circuit breakers, RCBOs-RCCBs for household and similar uses*;
- IEC 63052, *Power frequency overvoltage protective devices (POPs) for household and similar applications*;
- IEC 62752, *In-cable control and protection device for mode 2 charging of electric road vehicles (IC-CPD)*;
- IEC 62955, *Residual direct current detecting device (RDC-DD) to be used for mode 3 charging of electric vehicles*.

"

9 Modification to Clause 6, "Electromagnetic emission of products within the scope of SC23E, other than RCDs", and Clause 7, "Electromagnetic immunity of products within the scope of SC23E, other than RCDs"

Renumber Clause 6 as Clause A.2.

Renumber Clause 7 as Clause A.3.

Renumber subclause 7.1 as subclause A.3.1.

Renumber subclause 7.2 as subclause A.3.2.

In the 3rd paragraph of new subclause A.3.1, replace "7.2" with "A.3.2".

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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 When 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 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2020
IEC 61000-4-4	-	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2013
IEC 61000-4-5	2014	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2014
+ AMD1	2017		+ A1	2017
IEC 61000-4-6	-	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 61000-4-8	-	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	2010
IEC 61000-4-11	-	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase	EN 61000-4-11	2020
IEC 61000-4-16	2015	Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	EN 61000-4-16	2016

EN IEC 61543:2023/A11:2023 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN / HD</u>	<u>Year</u>
IEC 61000-4-19	-	Electromagnetic compatibility (EMC) - Part 4-19: Testing and measurement techniques - Test for immunity to conducted, differential mode disturbances and signalling in the frequency range 2 kHz to 150 kHz at a.c. power ports	EN 61000-4-19	2014
CISPR 14-1	-	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	EN 55014-1	2021

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