

SLOVENSKI STANDARD SIST EN 61008-1:2013/A1:2014

01-december-2014

Odklopniki na preostali (residualni) tok brez vgrajene nadtokovne zaščite za gospodinjsko in podobno rabo (RCCB's) - 1. del: Splošna pravila (IEC 61008-1:2010/A1:2012, spremenjen)

Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) -- Part 1: General rules (IEC 61008-1:2010/A1:2012, modified)

iTeh STANDARD PREVIEW

Fehlerstrom-/Differenzstrom-Schutzschalter ohne eingebauten Überstromschutz (RCCBs) für Hausinstallationen und für ähnliche Anwendungen -- Teil 1: Allgemeine Anforderungen (IEC 61008-1:2010/A1:2012, modifiziert)

SIST EN 61008-1:2013/A1:2014

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Interrupteurs automatiques à courant différentiel résiduel sans dispositif de protection contre les surintensités incorporé pour usages domestiques et analogues (ID) -- Partie 1: Règles générales (CEI 61008-1:2010/A1:2012, modifiée)

Ta slovenski standard je istoveten z: EN 61008-1:2012/A1:2014

ICS:

29.120.50 Varovalke in druga Fuses and other overcurrent

medtokovna zaščita protection devices

SIST EN 61008-1:2013/A1:2014 en,fr,de

SIST EN 61008-1:2013/A1:2014

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EN 61008-1:2012/A1

NORME EUROPÉENNE EUROPÄISCHE NORM

October 2014

ICS 29.120.50

English Version

Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules (IEC 61008-1:2010/A1:2012, modified)

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This amendment A1 modifies the European Standard EN 61008-1:2012; it was approved by CENELEC on 2014-08-04. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its https://standards.iteh.ai/catalog/standards/sist/34640ad5-9a19-4542-931b-

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 61008-1:2012/A1:2014) consists of the text of IEC 61008-1:2010/A1:2012 prepared by SC 23E "Circuit-breakers and similar equipment for household use" of IEC/TC 23 "Electrical accessories", together with the common modifications 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 (dop	2015-08-04
	national level by publication of an identical national standard or	
	by endorsement	

latest date by which the national standards conflicting with this (dow)
 2017-08-04 document have to be withdrawn

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 61008-1:2010/A1:2012 are prefixed "Z".

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) ards/sist/34640ad5-9a19-4542-931b-b5278791544/sist-en-61008-1-2013-a1-2014

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

Endorsement notice

The text of the International Standard IEC 61008-1:2010/A1:2012 was approved by CENELEC as a European Standard with agreed common modifications.

Common modifications

Item	Clause	Common modifications			
1.	1	Replace			
		"Delete Note 5 and replace it by the following paragraph and new Note 5"			
		by			
		"Replace the paragraph beginning by "For RCCBs incorporated" by the following paragraph and add a new Note 5:""			
		Delete "the requirements of IEC 60884-1 or" in the new paragraph.			
		Add "for socket-outlets" between "national requirements" and "of the country".			
2.	2	Delete the modifications to Clause 2.			
3.	4.11	Delete the last dash and Note 3.			
		Add after common modifications on 4.11:			
		"Delete subclause 4.Z1.			
		Renumber subclause "4.Z2 According to the range of ambient air temperature" by "4.Z1 According to the range of ambient air temperature"."			
4.	Table 1	Delete the modification to Table 1D PREVIEW			
5.	Table 3	Delete the modifications to Table 3.10h			
6.	6	Replace			
		"Replace the contents of item k) by the following:" https://standards.iteh.ai/catalog/standards/sist/34640ad5-9a19-4542-931b- by b52787915f44/sist-en-61008-1-2013-a1-2014			
		"Replace the contents of item k) in Table Z3 by the following:"			
7.	6	Replace			
		"Replace in the twelfth paragraph after Note 1, the word "circuit" by "conductor""			
		by			
		"Replace in the eleventh paragraph of 6.Z1, the word "circuit" by "conductor""			
8.	6	Replace			
		"Add the following text at the end of Clause 6:"			
		by			
		"Add the following text at the end of Clause 6.Z1:"			
9.	8.1.3	Delete "before 9.7.1" in the new Note 1.			
10.	8.1.3 Table 5	Delete "Delete, in this table, point 5 in the first column and the existing Note 3."			
11.	8.1.4.4	Replace			
		"In the subclause, replace the existing text by the following:"			
		by			
		"In the subclause, replace the existing text <u>before the note</u> by the following:"			

Item	Clause	Common modifications					
12.	8.1.5.1	Replace					
		"Delete the second paragraph and the note in this subclause."					
		by					
		"Insert a second paragraph:					
		In this standard, only terminal	s for coppe	er conducto	rs are cons	idered."	
13.	8.1.5.1	Replace					
		"Annex J, K or L"					
		by					
		"Annex J or K"					
14.	8.1.5.2	Replace					
		"or terminals for external untr type terminals for use with co Annex L."					
		by					
		"VOID"					
15.	8.1.5.2 Table 6	Delete "NOTE Information on AWG is given in Annex ID."					
16.	9.1.1 Table 9	After "Delete, in this table, the dashed item "- Resistance of the insulation against an impulse voltage", add a new paragraph 1					
		"Add, in this table, at the end of the existing list, in the second column, the following subclause corresponding to Behaviour lattlow ambient air temperatures of RCCBs classified for use in the range of #25/°C to #40% C%: 4542-931b-9.Z1" b52787915f44/sist-en-61008-1-2013-a1-2014					
17.	9.5.1	Delete "NOTE Information on	AWG is giv	en in Annex	D."		
18.	9.7.7.2	Delete twice "(or path)"					
19.	9.7.7.4.1	Delete the two following rows:					
	Table 22	Single-phase system with mid-point earthed 120/240 ^{a)}	3,5	3,5	3,4	3,2	3,0
		Single phase system 120/240 240 ^{b)}	6,2	6,0	5,8	5,6	5,0
	Replace "Three-phase systems 230/400" by "Single-phase systems 230 or 400 Three-phase systems 400 or 230/400" Delete the two footnotes a) and b).						
20.	9.7.7.4.3	Delete twice "(or path)"					

Item	Clause	Common modifications		
21.	9.7.7.5	In the paragraph after Note 1, replace		
		"50 Hz/60 Hz"		
		by		
		"50 Hz"		
22.	9.7.7.5	Delete "(or path)" in the first dashed item.		
23.	9.7.7.5	Replace the last sentence of the paragraph after Note 4 by		
		"One test only is made, on one pole taken at random, with measurement of break time: the latter shall not exceed the value specified in Table 1 at $I_{\Delta n}$."		
24.	9.7.7.5	Delete the last paragraph "This test is not applied to devices with solid neutral."		
25.	9.11.2.1 a)	In the first modification, replace		
		"Figures 8, 9, 10, 11 and 12"		
		by		
		"Figures 7 and 12"		
26.	9.11.2.1 a)	Delete the modification "Replace, in the existing eighth paragraph of item a), the words "The additional impedance Z_3 " by "The additional impedance Z_1 "".		
27.	9.11.2.1 a)	Delete the modification "Replace, in the fifth paragraph after the existing Note 3, the words "resistor R₁" by "resistor R₂". ■ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		
28.	9.11.2.1 e)	Replace (standards.iteh.ai) "Replace, in the second paragraph of item e), the words "the current sensor O ₁ " by "the current sensor"." SIST EN 61008-1:2013/A1:2014 byps://standards.iteh.ai/catalog/standards/sist/34640ad5-9a19-4542-931b- "Replace, in the second paragraph of item e), the words "the current sensor I ₁ , I ₂ , I ₃ , I ₄ " by "the current sensor"."		
29.	9.11.2.1 e)	Delete the modification "Replace, in the third paragraph of item e), the word "Z ₃ " by "Z ₁ "."		
30.	9.11.2.3	Replace in the last modification		
		"fifth paragraph"		
		by		
		"fourth paragraph"		
31.	9.14	Replace		
		"From the fifth to the ninth paragraph"		
		by		
		"From the sixth to the tenth paragraph".		
32.	9.19.1	Delete the modification to 9.19.1.		
33.	9.25	Replace		
		"Add before Figure 1 the following new subclause:"		
		by		
		"Add before 9.Z1 the following new subclause:"		

Item	Clause	Common modifications					
34.	Before	In the first line of the modification, replace					
	Figure 7	"to 12"	"to 12"				
		by					
		"and 12"					
35.	Figure 8	Replace					
			dination with a S	SCPD of a single		and breaking capacity th two current paths	
		by					
		"Figure 8 – Void Reintroduce Fig		s:"			
36.	Figure 9	Replace					
		"Figure 9 – Test circuit for the verification of the rated making and breaking capacity and of the coordination with a SCPD of a two-pole RCCB, in case of a single-phase circuit (9.11) Replace Figure 9 by the following:" by "Figure 9 Lyold ANDARD PREVIEW Reintroduce Figure 9 as follows:"					
37.	Annex A	Replace the test sequence G of the new Table A.1 by					
	Table A.1	G ₀ 9.22.1 SIST EN (Reliability) (climatic tests) Higs://standards.steh.avcatalog/standards.stst/34540a5-9a19-4542-931b- Verification of correct operation at low ambient air temperature of RCCBs operating at temperatures between -25 °C and + 40 °C					
38.	Annex A	Replace					
	Table A.2	"In Table A.2, replace A by A₁.					
		In Table A.2, ad	ld a new row aft	ter the new A ₁ c	ontaining the fo	llowing:	
		A ₂ 3 2 3					
		"					
		by					
		"In Table A.2, replace A by the following:					
		A ₁	1	1	-		
		A ₂	3	2	3		
		and delete footnote ^f "					
39.	Annex J	Replace					
		"Add the following	ng new Annex .	J:"			
		by					
		"Replace Annex	J by the follow	ving:"			

Item	Clause	Common modifications			
40.	Annex J	In the first paragraph, replace			
	J.1	"with screwless terminals"			
		by			
		"with universal screwless terminals"			
41.	Annex J	Replace Note 1 by			
	J.1	"NOTE 1 Non-universal terminals are subject to special national conditions."			
42.	Annex J J.3.3	Delete Note 1 to entry in Definition J.3.3.			
43.	Annex J	Replace			
	J.6	"Non-universal terminals:"			
		by			
		"Non-universal terminals (if accepted by Special National Conditions):"			
44.	Annex J J.8.2	Replace Table J.1 by			
	Table J.1	Table J.1 – Connectable conductors			
		Connectable conductors and their theoretical diameter			
		Rigid Flexible			
		Solid Stranded			
		mm ² (Standards. Itelami) mm ² Ø mm			
		1,0 SIST EN 61008-1:20 3/A1:2014 1,0 1,5			
		https://stanll.5rds.iteh.ai/catalog/st5ndards/sist/34640a75-9a19-4542-9315- 1,8			
		2,5 ^{b527879} 15f44/sist,en-61008-1-2012-21-2014 2,5 2,3			
		4,0 2,4 2,7 4,0 2,9			
		NOTE Diameters of the largest rigid and flexible conductors are based on Table C.1 of IEC 60228:2004.			
45.	Annex J J.10	Delete the last four references (ASTM B172-01a, ICEA S-19-81 / NEMA WC3, ICEA S-66-524 / NEMA WC7 and ICEA S-68-516 / NEMA WC8).			
46.	Annex K K.1	Delete Note 1.			
47.	Annex K K.1	At the end of the second paragraph, delete "(AWG equal to or greater than 12)."			
48.	Annex K K.8.2.2	Delete Note 1.			
49.	Annex L	Delete Annex L.			

Item	Clause	Common modifications						
50.	Annex ZA	Add the following new modifications:						
		"Annex ZA (normative) Normative references to international publications with their corresponding European publications						
		Delete the reference to IEC 60051.						
		Add the follow	Add the following new references to the existing list:					
		<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>		
		IEC 60228	2004	Conductors of insulated cables	EN 60228 + corr. May	2005 2005		
		IEC 60664-3	-	Insulation coordination for equipment within low-voltage systems Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	-		
		Replace the re	eference	to IEC 61543 by the following:				
		IEC 61543 - + A1 (mod) - + A2 - " iTeh	1995 - 2004 - 2005 -	Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility	EN 61543 + corr. December + A11 + corr. May + A2 + A12	1995 1997 2003 2004 2006 2005		
51.	Annex ZXX	Add a new m	odification	dards.iteh.ai)				
		"Based on EN technically mo	SIST E contents of 161008F1 odified an t of reliab	ive) List of clauses that require replication of the behaviour of components betance to abnormal heat and to fire"	uirements have be n as applicable: nal copper conduc	ctors		
52.	Bibliography	Replace						
		"IEC 60664-5"	,					
		by						
		"EN 60664-5"						
		Replace						
		"IEC 60695-2-	-11:2000'	,				
		by						
		"EN 60695-2-	11:2001"					

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IEC 61008-1

Edition 3.0 2012-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Residual current operated circuit breakers without integral overcurrent protection for household and similar uses (RCCBs) – Part 1: General rules

SIST EN 61008-1:2013/A1:2014

Interrupteurs automatiques à courant différentiel résiduel sans dispositif de protection contre les surintensités incorporé pour usages domestiques et analogues (ID) –

Partie 1: Règles générales

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE CODE PRIX

ICS 29.120.50 ISBN 978-2-83220-018-6

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FOREWORD

This amendment has been prepared by subcommittee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories.

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

FDIS	Report on voting
23E/740/FDIS	23E/744/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- · amended.

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1 Scope

Delete Note 5 and replace it by the following paragraph and new Note 5:

For RCCBs incorporated in, or intended only for association with socket-outlets, the requirements of this standard may be used, as far as applicable, in conjunction with the requirements of IEC 60884-1 or the national requirements of the country where the product is placed on the market.

NOTE 5 RCCBs incorporated in, or intended only for association with socket-outlets, can either meet IEC 62640 or this standard.

2 Normative references

Delete the reference to IEC 60051.

Add to the existing list, the following new references:

IEC 60228:2004, Conductors of insulated cables

IEC 60664-3, Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution

Replace the reference to IEC 61543:1995 by the following new reference:

IEC 61543:1995, Residual current-operated protective devices (RCDs) for household and similar use – Electromagnetic compatibility

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Amendment 1(2004) Amendment 2 (2005)

4.10 According to the method of connection

In this subclause, replace the existing text and note by the following:

- RCCBs, the electrical connections of which are not associated with the mechanical mounting;
- RCCBs, the electrical connections of which are associated with the mechanical mounting.

NOTE Examples of this type are:

- plug-in type;
- bolt-on type;
- screw-in type.

Some RCCBs may be of the plug-in type or bolt-on type on the line side only, the load terminals being usually suitable for wiring connection.

Add the following new subclause:

4.11 According to the type of terminals:

- RCCBs with screw-type terminals for external copper conductors;
- RCCBs with screwless type terminals for external copper conductors;
- NOTE 1 The requirements for RCCBs equipped with this type of terminals are given in Annex J.
- RCCBs with flat quick-connect terminals for external copper conductors;
 - NOTE 2 The requirements for RCCBs equipped with these types of terminals are given in Annex K.
- RCCBs with screw-type terminals for external aluminium conductors; 1b-
 - NOTE 3 The requirements for RCCBs equipped with these types of terminals are under consideration.

Table 1 – Limit values of break time and non-actuating time for alternating residual currents (r.m.s values) for type AC and A RCCB

Replace, in this Table, the word "non-operating" by "non-actuating".

Table 3 – Rated impulse withstand voltage as a function of the nominal voltage of the installation

Replace, in Note 2, "see Table 15" by "see Table 22".

Replace, in table footnote a), "(see Tables 5 and 15)" by "(see Tables 5 and 22)".

6 Marking and other product information

Replace the contents of item k) by the following:

k) the position of use, if necessary;

Replace in the twelfth paragraph after Note 1, the word "circuit" by "conductor"

Add the following text at the end of Clause 6:

For universal terminals (for rigid-solid, rigid-stranded and flexible conductors):

no marking.